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1939 REPORT

Cotton Variety Tests in Oklahoma

CONDUCTED BY

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in co-operation with
United States Department of Agriculture

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While it is impossible to draw definite conclusions on one year's data regarding the most desirable varieties for the different sections of the State, the data collected in these tests indicate that, in the eastern and central portions of the Oklahoma Cotton Belt, the Deltapine and Stoneville strains or types of cotton are perhaps the best producers of acceptable staple, with the Rowden types making a satisfactory showing, and the Half-and-Half types making good yields of lint cotton, but having an unsatisfactory staple length. In the southwestern portion of the State, the Mebane types are indicated to be rather outstanding from the standpoint of production and as to acceptable staple, with Acala 5 and Acala 8 types also making good showings. In the southwestern, as in the eastern sections, the Half-and-Half types were good producers, but the staple length is perhaps too short for best market demand.

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1939 REPORT
COTTON VARIETY TESTS IN OKLAHOMA

Conducted By
Office of Cotton Improvement, Agronomy Department, Oklahoma Experiment Station, in Co-operation with the United States Department of Agriculture.

Dunlavy, Parrott, Self[1]

The following pages give the results of nine cotton variety and strain tests conducted in the State of Oklahoma during the crop year 1939. These tests were conducted in Washita, Kiowa, Comanche, and Tillman counties in the southwestern part of the State; in Payne, Pontotoc, and Johnston counties in the central portion; and in Pittsburg, and Wagoner counties in the eastern part of the State. With the exception of those in Payne, Johnston, and Comanche counties, the tests were conducted in co-operation with farmers and landowners having available land and other facilities necessary for the work. In Payne County, the test was conducted on the Oklahoma Agricultural Experiment Station farm near Perkins. The Johnston County test was conducted on the farm of the Murray State School of Agriculture near Tishomingo, and the Comanche County test on the U. S. Dry Land Field Station north of Lawton. Without exception, the men in charge of the farm or station co-operated with the Office of Cotton Improvement in a very fine manner, and the writers of this circular wish to express their appreciation for this co-operation.

The arrangement of these tests and the planting, chopping, and picking were the direct responsibilities of the Office of Cotton Improvement, while the field co-operators were responsible for preparation of land and cultivation. All tests were conducted on land of uniform character which had been carefully prepared for planting.

With the exception of the Washita County test near Cordell, each test was planted in eight series. The Cordell test was planted in four series.

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Each variety or strain of cotton included in the test was planted once in each series in a plat consisting of one row fifty (50) to seventy (70) feet long. The location of each variety's plat was such that no variety appeared more than once in a series or more than once in a given row.[2] On variety plats that did not have a good stand, only that portion of the row having a good stand was picked.

Equipment for keeping weather data was not available at each of the tests, and, for that reason, data were secured from the weather observation station located at the nearest point to the test. These weather data were secured from the publications of the Weather Bureau, U. S. Department of Agriculture.

At harvesting time, each variety plat was picked separately and the total weight of seed cotton recorded. A sample of seed cotton was saved for securing data on lint percent and staple, and a given number of bolls were harvested for boll size data.

Tables 11 to 19 give the complete data of each of the individual tests conducted in 1939. "Acre Yield" is recorded in terms of lint, seed, and seed cotton. Under the heading "Gross Value Per Acre" is given the gross acre income of seed and lint as based on 1939 prices and also as based on the average prices prevailing in the ten-year period 1928-1937. The 1939 staple price differentials of middling cotton were secured from the Houston Cotton Exchange and Board of Trade and from the Bureau of Agricultural Economics, U. S. Department of Agriculture, Dallas, Texas. In view of the fact that staple differentials for 1939 were of less magnitude than usual, another calculation of gross value per acre was made on the basis of prices for the ten-year period 1928-1937. These prices on 7/8 inch cotton, with discounts for 13/16 inch cotton and premiums for 15/16, 1, 1-1/16, and 1-1/8 inch lengths,

(2) Due to an error in planting the Ada (Pontotoc County) test, this restricted randomization method of planting was not fully carried out.

are listed on page 115 of "Agricultural Statistics - 1939", published by the U. S. Department of Agriculture. In calculating the value of the thirty-second interval between listings on this table, the writers merely split the difference between the sixteenth intervals. In calculating the value of 3/4 inch cotton (which is not quoted), an arbitrary value of 71 points "off" 13/16 value was used for the ten-year average data and 55 points "off" the 13/16 value for the 1939 data. The prices used in calculating acre income of lint are shown in Table 1.

Table 1. - Prices Used in Calculating Acre Income From Lint.

STAPLE LENGTH (inches)	1939 VALUE	10-YEAR AVERAGE VALUE 1928-1937
3/4	$7.00	$10.00
13/16	7.55	10.71
7/8	8.55	11.32
29/32	8.70	11.49
15/16	8.85	11.67
31/32	8.95	11.89
1	9.05	12.12
1-1/32	9.15	12.39
1-1/16	9.25	12.66
1-3/32	9.40	12.95
1-1/8	9.65	13.25

The prices used in calculating acre income of seed are:

1939 VALUE - $20.00 Per Ton
10-YEAR AVERAGE VALUE - - - - - - - - - - - - - - 24.00 Per Ton

Lint percent data was secured by dividing the weight of lint by the combined weight of lint and seed after the seed cotton had gone through a 10-saw gin.

The size of boll was measured in terms of "Bolls Per Pound". In describing boll size in this manner, it is of course understood that the larger the number the smaller is the boll size, and vice versa.

"Fiber Characteristics" were determined by two expert cotton classers actively engaged in the commercial classing of cotton. All "Fibre Characteristics" were determined on samples designated by number in order that the classer might not know the variety under observation.

Under "Length" of fiber, two figures are listed. The first of these two figures indicates the "actual" length of the lint in thirty-seconds of an

inch; i.e. "32" would indicate one-inch cotton. The second figure in this column indicates the "value" length of the lint. In those cases where the second or "value" figure is less than the first, or "actual" figure, it is evidenced that the fibers were weak and/or wastey, and that, even though the cotton stapled a longer length ("actual"), the cotton did not have the value of the "actual" length, due to this weakness and/or wastiness. Gross acre income of lint was calculated on "value" length.

Under the heading of "Neps" is listed the characteristics of the lint cotton in relation to small entanglements of fiber sometimes seen in cotton after it has gone through a saw gin. The classification as to neps is as follows:

(1) Very slightly neppy;
(2) Slightly neppy;
(3) Neppy; and
(4) Very neppy.

These classifications are in accordance with standards which have been set up.

Under the fiber characteristics of "Character" (Char), each sample was classified as to whether it was "hard" (H), "medium" (M), or "soft" (S). A "hard" sample of cotton is one which has a harsh or wiry feel to the hand, whereas "soft" cotton has a soft or smooth feel. No standards have been set up for this classification, and the cotton trade has established its own description for this part of cotton classification. Much of the cotton in Oklahoma in 1939 was of a "soft" character, which caused considerable criticism by the trade.

The "Strength" (Stgth) of the fibers from the samples secured from the varieties and strains included in these tests were classified as "strong" (S), "medium" (M), and "weak" (W). These terms are, of course, self-explanatory.

The "Uniformity" (Unif) of the fibers from the samples of varieties and strains grown in these tests were classified as "good" (G), "medium" (M), and "wastey" (W). Wastey cotton is cotton in which the fibers are conspicuously uneven, which is, of course, objectionable to the cotton spinner.

EASTERN AND CENTRAL AREA TESTS

PAYNE COUNTY TEST

The Payne County test was conducted on the Oklahoma Agricultural Experiment Station's farm located nine miles south of Stillwater, near Perkins. Mr. W. C. Elder is superintendent of the Station. This test, which included 56 varieties and strains, was planted on a tight, upland soil of medium fertility. The test was planted May 10, 1939, and came up to a good stand within a short time. It made normal growth throughout the season.

WEATHER CONDITIONS

Table 2 gives the monthly mean and monthly normal temperature average, and the total monthly rainfall, from October, 1938, to September, 1939, inclusive, with the normal monthly precipitation shown for those months.

Table 2. - Temperature and Rainfall Data; Payne County Test.

MONTH	TEMPERATURE		RAINFALL	
(1938)	Mean	Normal	Total	Normal
October	68.2	61.1	0.37	3.09
November	48.6	49.2	2.60	2.38
December	40.6	38.0	0.42	1.14
(1939)				
January	43.4	36.3	3.42	1.14
February	37.2	39.4	0.61	1.32
March	53.8	50.0	1.09	2.31
April	59.8	59.4	3.64	3.97
May	70.6	67.6	2.99	4.95
June	78.0	76.6	4.23	3.99
July	83.8	80.6	2.87	2.76
August	81.6	80.8	3.62	3.08
September	80.4	73.2	0.39	3.70

From Table 2 it will be noticed that the monthly mean temperatures were generally higher than the normal average; particularly was this true during the months of October, 1938, and January and September, 1939. The mean temperature for April was practically normal, while the mean temperature for May was three degrees higher than the normal average. The average of the mean temperatures for the growing months of June, July and August was 81.1 degrees compared to a normal for this period of 79.3 degrees. The mean temperature for September

was 7.2 degrees above normal; and, as a result of the high temperatures during this month, some damage was done to the later maturing varieties.

The total rainfall for the period October, 1938, to August, 1939, inclusive, was 25.86 inches, compared to a normal of 30.13 inches. The amount of moisture received during the fall and winter "storage" months of October, 1938, to March, 1939, inclusive, was 8.51 inches, or 2.87 inches below normal. During the spring planting months of April and May, 6.63 inches of rainfall were received, or 2.29 inches less than normal. During the growing months of June, July and August, 10.72 inches of rain were received, which was 0.89 inch more than normal.

RESULTS

As the result of better than average growing conditions during the period April to September, 1939, and the fact that there was practically no insect infestation on this test, a good crop of cotton was secured. Yields ranged from 509 pounds to 267 pounds of lint per acre, and the gross acre income for the various varieties based on 1939 staple differentials of middling cotton ranged from $53.81 to $31.72 per acre.

The ten leading varieties ranged from 509 pounds to 446 pounds of lint per acre, and had an average production of 471 pounds per acre as compared to an average of 408 pounds per acre for all strains and varieties included in the test. If the average lint production of all varieties included in the test were assumed to be 100 pounds per acre, the average production of the ten best-producing varieties would be 115.4 pounds per acre, and the remaining 46 strains and varieties would have an acre lint production of 96.8 pounds per acre. The ten leading varieties included two Half-and-Half types, two Deltapine, three Stoneville, two Mebane, and one Acala 5. The average acre income for all varieties in the test, based on 1939 prices, was $43.95, whereas the corresponding income for the ten highest producers in the test was $48.77. The average staple length ("actual") of the ten leading varieties was 29.5 thirty-seconds, while the 46 remaining varieties had an average

staple length of 31.1 thirty-seconds. The average staple length of all 56 varieties and strains included in the test was 30.8 thirty-seconds, which is about normal. According to the "Character" classification of all varieties grown in this test, 46.4% were classified as "hard" (H), 33.9% as "medium" (M), and 19.6% as "soft" (S). 39.3% of the fiber from the varieties grown in this test were classified as "strong" (S), 44.6% as "medium" (M), and 16.1% as "weak" (W). For most varieties and strains grown in this test, the lint percent was lower than is usually expected, and the boll size slightly smaller.

WAGONER COUNTY TEST

The Wagoner County test was conducted in cooperation with Mr. G. A. Childress, and was located in the Choska bottom in the Arkansas River Valley between the towns of Coweta and Porter. This test included forty (40) varieties and strains and was planted on very fertile bottom land admirably adapted to the growing of cotton. The test was first planted May 5, 1939, and was replanted May 24, replanting being necessary on account of loss of stand on first planting due to torrential rain. Cotton came up to a good stand within a short time, and made normal growth throughout the season.

WEATHER CONDITIONS

Table 3 gives the monthly mean and monthly normal temperature average and the total monthly rainfall from October, 1938, to September, 1939, inclusive, with the normal precipitation for those months. These data were taken from the Muskogee Weather Observation Station, which is located about 18 miles southeast of the test.

Table 3. - Temperature and Rainfall Data; Wagoner County Test.

MONTH (1938)	TEMPERATURE		RAINFALL	
	Mean	Normal	Total	Normal
October	68.8	62.9	0.49	4.32
November	51.0	51.4	3.25	2.8
December	43.3	40.0	0.81	2.29

(Table 3 - Continued)

Table 3. - Continued

MONTH (1939)	TEMPERATURE Mean	TEMPERATURE Normal	RAINFALL Total	RAINFALL Normal
January	46.0	38.4	2.64	2.62
February	41.2	41.4	3.15	1.91
March	56.8	51.5	1.26	3.06
April	60.4	60.7	2.39	4.24
May	70.8	68.3	5.02	4.84
June	78.2	77.0	5.34	4.15
July	84.4	81.0	2.48	2.85
August	82.7	81.6	3.34	3.50
September	81.7	74.7	0.34	3.30

From Table 3 it will be noticed that the monthly mean temperatures were generally higher than the normal average. Particularly was this true for the months of October, 1938, and January, March, July, and September, 1939. The mean temperature for April was practically normal, while the mean temperature for May was 2.5 degrees above normal. The average mean temperature for the growing months of June, July and August was 81.8 degrees, as compared to a normal for this period of 79.9 degrees. The mean temperature for September was 7.0 degrees above normal. These unseasonably high temperatures, however, did not affect the crop to any extent due to the fact that there was very little hot wind and to the fact that sufficient soil moisture was available to enable the crop to withstand the heat.

The total rainfall for the period October, 1938, to August, 1939, was 30.17 inches, as compared to a normal of 36.28 inches. The amount of moisture received during the fall and winter "storage" months of October, 1938, to March, 1939, inclusive, was 11.60 inches, or 5.10 inches below normal. During the spring planting months of April and May, 7.41 inches of rainfall were received, or 1.67 inches less than normal. During the growing months of June, July, and August, 11.16 inches of rain were received, which was 0.66 inch above normal. While it will be noted that less than normal rainfall was received for nearly all of the periods discussed above, the yields of the varieties and strains grown in this test indicate that sufficient rainfall was received for the production of a very heavy crop.

RESULTS

As the result of ideal growing conditions during the crop year of 1939, and the fact that there was very little insect infestation on this test, an extremely good crop of cotton was secured. Yields ranged from 1056 pounds to 593 pounds of lint per acre, and the gross acre income for all varieties and strains, based on 1939 staple price differential of middling cotton, ranged from $118.43 to $65.12.

The ten leading varieties ranged in production from 1056 pounds to 927 pounds of lint per acre, and had an average production of 987 pounds per acre as compared to an average of 833 pounds per acre for all strains and varieties included in the test. If the average lint production of all varieties and strains included in the test were assumed to be 100 pounds per acre, the average production of the ten best strains and varieties would be 118.5 pounds per acre, and the remaining thirty strains and varieties would have an acre lint yield of 93.9 pounds per acre. The ten leading varieties included one Half-and-Half type, three Deltapine, three Stoneville, two Mebane, and one Rowden. The average acre income for all varieties included in the test, based on 1939 prices, was $92.09, whereas the corresponding income for the ten highest producers in the test was $108.25. The average staple length (actual) of the ten high-producing varieties was 31.9 thirty-seconds, while the thirty remaining varieties had an average staple length of 32.4 thirty-seconds. The average staple length of all 40 varieties and strains included in the test was 32.3 thirty-seconds, which is slightly above normal. According to the "Character" lint classification of all varieties grown in this test, 47.5% were classified as "hard" (H), 47.5% as "medium" (M), and 5% as "soft" (S). 55% of the fiber from the varieties grown in this test were classified as "strong" (S), 45% as "medium" (M), and none were classified as "weak" (W). For most varieties and strains grown in this test, the lint percent was lower than is usually expected, and the bolls considerably larger.

PITTSBURG COUNTY TEST

The Pittsburg County test was conducted in cooperation with Mr. A. Grossman and Mr. Hall Weeks, and was located in the South Canadian River bottom about three miles northwest of the town of Canadian. This test included 56 varieties and strains and was planted on fertile river bottom land (Teller fine sandy loam) admirably adapted to the growing of cotton. The test was planted May 4, 1939, but, due to the fact that a previous planting of cotton on the land forced the planting of this test in the water furrow, the cotton came up to an irregular stand and was slow in getting started off. The cotton in this test grew off rather slowly, and at the end of the season the plants were below normal in size.

WEATHER CONDITIONS

Table 4 gives the monthly mean and monthly normal temperature average and the total monthly rainfall from October, 1938, to September, 1939, inclusive, with the normal precipitation shown for those months. These data were taken from the McAlester Weather Observation Station, which is located about 18 miles south and west of the test.

Table 4. - Temperature and Rainfall Data; Pittsburg County Test.

MONTH (1938)	TEMPERATURE		RAINFALL	
	Mean	Normal	Total	Normal
October	68.3	64.3	0.11	4.27
November	51.6	53.0	2.53	2.84
December	44.4	42.6	1.80	2.67
(1939)				
January	45.8	40.6	2.64	2.87
February	42.0	44.6	4.31	2.20
March	55.8	54.0	2.56	3.09
April	59.1	62.1	4.30	4.58
May	70.3	69.4	3.32	5.97
June	78.2	78.2	3.38	4.78
July	83.8	82.3	5.07	3.06
August	81.2	82.2	2.52	3.54
September	81.3	76.0	0.31	3.46

From Table 4 it will be noticed that the temperatures for most of the months during this period were about normal, the greatest variation being in

October, 1938, when the temperature was above normal, and for January and September, 1939, when the temperatures were also above normal. The mean temperature for April was three degrees below normal, whereas the monthly mean temperature for May was slightly above normal. The average mean temperature for the growing months of June, July and August was 81.1 degrees, as compared to a normal for this period of 80.9 degrees.

The total rainfall for the period October, 1938, to August, 1939, inclusive, was 32.54 inches as compared to a normal of 39.87 inches. The amount of moisture received during the fall and winter "storage" months of October, 1938, to March, 1939, inclusive, was 13.95 inches, or 3.99 inches below normal. During the spring planting months of April and May, 7.62 inches of rainfall were received, or 2.93 inches less than normal. During the growing months of June, July, and August, 10.97 inches of rain were received, which was 0.41 inch below normal.

RESULTS

In this test, yields ranged from 495 pounds to 298 pounds of lint per acre and the gross acre income from all varieties and strains, based on 1939 staple price differentials of middling cotton, ranged from $51.96 to $33.90. The ten leading varieties ranged from 495 pounds to 418 pounds of lint per acre, and had an average production of 442 pounds of lint per acre as compared to an average of 379 pounds per acre for all strains and varieties included in the test. If the average lint production of all varieties included in the test were assumed to be 100 pounds per acre, the average production of the ten best strains and varieties would be 116.6 pounds per acre, and the remaining 46 strains and varieties would have an acre lint yield of 96.3 pounds. The ten leading varieties included one Half-and-Half type, four Deltapine, three Stoneville, one Mebane, and one Lone Star. The average acre income for all varieties included in the test, based on 1939 prices, was $40.52, whereas the corresponding income for the ten highest producers in the test was $46.94. The average staple length (actual) of the ten high-producing varieties was

31.9 thirty-seconds, while the remaining 46 varieties had an average staple length of 31.5 thirty-seconds. The average staple length of all 56 varieties and strains included in the test was 31.6 thirty-seconds, which is about normal. According to the "Character" lint classification of all varieties grown in the test, 58.9% were classified as "hard" (H), 35.7% as "medium" (M), and 5.4% as "soft" (S). 60.7% of the fiber from the varieties grown in this test were classified as "strong" (S), 39.3% were classified as "medium" (M), and none were "weak"(W). For most varieties and strains grown in this test, the lint percent and boll size were about normal.

PONTOTOC COUNTY TEST

The Pontotoc County test was conducted in cooperation with Mr. G. J. Morton and Mr. Archie Brannon, and was located about one and one-half miles west of the city of Ada. This test included 46 varieties and strains and was planted on creek bottom land of high fertility. The test was planted May 2, 1939, and came up within a very few days to a rather skippy stand.

WEATHER CONDITIONS

Table 5 gives the monthly mean and the monthly normal temperature average and the total monthly rainfall from October, 1938, to September, 1939, inclusive, with the normal precipitation shown for those months. These data were taken from the Ada Weather Observation Station.

Table 5. - Temperature and Rainfall Data; Pontotoc County Test.

MONTH	TEMPERATURE		RAINFALL	
(1938)	Mean	Normal	Total	Normal
October	69.4	63.3	1.54	3.70
November	50.2	52.3	2.25	2.28
December	44.0	42.3	0.47	2.15
(1939)				
January	46.1	39.8	2.25	2.13
February	----	----	1.40	1.56
March	56.8	53.0	1.52	2.64
April	61.2	61.2	2.17	4.06
May	72.2	68.5	3.30	6.36
June	78.8	77.3	6.21	4.30
July	85.6	82.3	0.91	3.08
August	84.3	81.9	1.75	3.67
September	82.4	74.9	0.43	4.04

The mean temperature for April was exactly the same as the average normal temperature; however, the average May temperature of 72.2 degrees was 3.7 degrees higher than the average normal for that month. The average mean temperature for the growing months of June, July, and August was 82.9 degrees, as compared to a normal for this period of 80.5 degrees.

The total rainfall for the period October, 1938, to August, 1939, inclusive, was 23.77 inches as compared with a normal of 35.93 inches. The amount of moisture received during the fall and winter "storage" months of October, 1938, to March, 1939, inclusive, was 9.43 inches, or 5.03 inches below normal. During the spring planting months of April and May, 5.47 inches of rainfall were received, or 4.95 inches below normal. During the growing months of June, July and August, 8.87 inches of rain were received, which was 2.18 inches below normal. The cotton in this test suffered through lack of moisture during the months of July and August, and the production of the various varieties and strains included in the test was below normal for that section.

RESULTS

In this test, yields ranged from 242 pounds to 140 pounds of lint per acre, and the gross acre income from all varieties and strains, based on the 1939 staple price differential of middling cotton, ranged from $26.00 to $15.19. The ten leading varieties ranged from 242 to 206 pounds of lint per acre, and had an average production of 217 pounds of lint per acre, as compared to an average of 191 pounds per acre for all strains and varieties included in the test. If the average lint production of all varieties included in the test were assumed to be 100 pounds per acre, the average production of the ten best varieties and strains would be 113.6 pounds per acre, and the remaining 36 strains and varieties would have a yield of 95.8 pounds of lint per acre. The first ten placings of varieties and strains included in this test, when comparing yield of lint cotton per acre, include eleven (11) varieties due to the fact that three varieties in this group yielded the same amount. Of these eleven varieties, one was of the Half-and-Half type, one Deltapine, one Stoneville, two Mebane (classifying Qualla A-2 as Mebane type),

two Lone Star, one Acala 5, and three Rowden. The average acre income for all varieties and strains included in the test, based on 1939 prices, was $19.93, whereas the corresponding income for the ten highest producers in the test was $22.88. The average staple length (actual) of the ten high producing varieties was 29.1 thirty-seconds, while the remaining 36 varieties and strains had an average staple length of 29.4 thirty-seconds. The average staple length of all 46 varieties and strains included in the test was 29.3 thirty-seconds, which is somewhat below normal. According to the "Character" lint classification of all varieties grown in the test, 26.1% were classified as "hard" (H), 32.6% as "medium" (M), and 41.3% as "soft" (S). 26.1% of the fiber from the varieties grown in the test were classified as "strong" (S), 34.8% as "medium" (M), and 39.1% as "weak" (W). For most varieties and strains grown in this test, the lint percent was slightly lower than normal, and the bolls smaller.

JOHNSTON COUNTY TEST

The Johnston County test was conducted in co-operation with the Murray State School of Agriculture and was located near Tishomingo, with Mr. C. O. Ferguson in charge. This test included 37 varieties and strains and was planted on a tight-natured upland soil of medium fertility. The test was first planted May 3, 1939, and was replanted May 22, 1939. Heavy rains after the first planting were responsible for the loss of stand and necessity of replanting. The cotton of this test came up to a good stand and grew well throughout the season, making good yields.

WEATHER CONDITIONS

Table 6 gives the monthly mean and monthly normal temperature average, and the total monthly rainfall, from October, 1938, to September, 1939, inclusive, with the normal monthly precipitation for those months. These data were from the Tishomingo Weather Observation Station.

Table 6. - Temperature and Rainfall Data; Johnston County Test.

MONTH (1938)	TEMPERATURE		RAINFALL	
	Mean	Normal	Total	Normal
October	67.0	63.9	0.72	3.86
November	----	----	1.31	2.43
December	45.0	43.0	1.04	2.22
(1939)				
January	48.2	41.6	2.40	1.98
February	42.6	45.1	3.95	1.99
March	58.3	54.7	3.02	2.35
April	62.7	62.4	4.74	3.97
May	72.2	69.5	3.44	5.06
June	79.4	78.0	4.96	4.44
July	86.4	81.9	1.07	3.28
August	83.6	82.1	3.26	2.44
September	80.9	75.8	Trace	3.30

The mean temperature for April was practically the same as the average normal temperature. However, the average temperature for May was 2.7 degrees higher than the normal for that month. The average mean temperature for the growing months of June, July, and August, was 83.1 degrees, or 2.4 degrees below normal. Total rainfall for the period October, 1938, to August, 1939, inclusive, was 29.91 inches as compared to a normal of 34.02 inches. The amount of moisture received during the fall and winter "storage" months of October, 1938, to March, 1939, inclusive, was 12.44 inches, or 2.39 inches above normal. During the spring planting months of April and May, 8.18 inches of rainfall were received, or 0.85 inch below normal. During the growing months of June, July, and August, 9.29 inches of rain were received, which was 0.87 inch below normal.

RESULTS

In this test, yields ranged from 329 pounds to 199 pounds of lint per acre, and the gross acre income from all varieties and strains, based on the 1939 staple price differentials of middling cotton, ranged from $35.45 to $23.35. The ten leading varieties ranged from 329 pounds to 303 pounds of lint per acre, and had an average lint production of 319 pounds per acre, as compared to an average of 277 pounds per acre for all strains and varieties included in the test. If the average lint production of all varieties included in this test were assumed to be 100 pounds per acre, the average

production of the ten best-producing varieties and strains would be 115.2 pounds per acre, and the remaining 27 varieties and strains would have an average acre yield of 94.6 pounds of lint per acre. The ten leading varieties included two Half-and-Half types, two Deltapine, one Stoneville, three Mebane, one Acala 8, and one Acala 5. The average acre income for all varieties and strains included in the test, based on 1939 prices, was $29.83, whereas the corresponding income for the ten highest producers in the test was $33.29. The average staple length (actual) of the ten high-producing varieties was 29.9 thirty-seconds, while the remaining 27 varieties and strains had an average staple length of 31.6 thirty-seconds. The average staple length of all 37 varieties and strains included in the test was 31.1 thirty-seconds, which is about normal. According to the "Character" lint classification of all varieties grown in the test, 35.1% were classified as "hard" (H), 35.1% as "medium" (M), and 29.7% as "soft" (S). 40.5% of the fibers from the varieties grown in the test were classified as "strong" (S), 54.1% as "medium" (M), and 5.4% as "weak" (W). For most varieties and strains grown in this test, the lint percent was slightly lower than is usually expected, and the bolls slightly smaller.

SOUTHWESTERN AREA TESTS

TILLMAN COUNTY TEST

The Tillman County test was conducted in co-operation with Mr. Jake Kamp, and was located one and one-half miles south of Tipton and about the same distance north of the Southwestern Cotton Sub-station. This test included 72 varieties and strains of cotton, and was planted on a soil which is classified as Tipton very fine sandy loam. This type of soil is considered the best cotton land in the Tipton area, and is noted for its high productivity and ability to produce a good crop under drouthy conditions. The test was planted May 22, 1939. The cotton in this test came up to an irregular stand due to the fact that the soil was dry at the time of planting; however, considerable hand work in the field finally resulted in a fairly uniform stand of cotton.

WEATHER CONDITIONS

Table 7 gives the monthly mean and the average normal temperature and the total monthly and the average normal rainfall from the Frederick Weather Observation Station, and, also, the total rainfall from the observation station maintained by the Southwestern Cotton Sub-station. The Frederick Station is eleven miles southeast of the variety test plot, and the Tipton Sub-station is about one and one-half miles south of the plot.

Table 7. - Temperature and Rainfall Data; Tillman County Test.

MONTH (1938)	(Frederick) TEMPERATURE Mean	Normal	(Frederick) RAINFALL Total	Normal	TIPTON TOTAL RAINFALL
October	71.5	64.4	0.51	3.17	0.69
November	51.4	53.1	1.35	2.05	1.25
December	45.0	41.6	0.32	1.41	0.26
(1939)					
January	46.6	40.6	3.26	0.93	3.29
February	42.5	45.5	0.19	1.06	0.19
March	57.4	53.8	2.48	1.62	1.94
April	62.8	62.3	0.59	2.84	0.45
May	73.6	70.7	1.95	4.06	1.87
June	82.8	79.5	2.54	3.38	2.56
July	88.3	83.6	0.16	2.52	0.00
August	83.5	83.2	6.50	2.06	3.69
September	81.1	76.1	0.00	2.94	Trace

The mean temperature for April at Frederick was practically normal, and for May it was 2.9 degrees above normal. The average monthly mean temperature for the growing months of June, July, and August, was 84.9 degrees, which was 2.8 degrees above normal. The total average normal rainfall at Frederick for the fall and winter "storage" months of October to March, inclusive, was 10.24 inches. During this period (October, 1938, to March, 1939, inclusive), the total rainfall recorded at Frederick was 8.11 inches and at the Sub-station was 7.62 inches. The total average normal rainfall at Frederick for the months of April and May is 6.90 inches, while during this period in 1939 the total recorded at Frederick was 2.54 inches and at the Sub-station was 2.32 inches. The average normal rainfall for the growing months of June, July, and August at the Frederick Station is 7.96 inches,

whereas the total for this period recorded at Frederick in 1939 was 9.20 inches, and at the Sub-station gauge, 6.25 inches. The rains of a half-inch or more recorded at the Sub-station gauge during the 1939 season were as follows: May 15, 0.90 inch; June 11, 0.74 inch; June 20, 0.81 inch; August 3, 0.94 inch; August 7, 1.66 inches; and August 22, 0.81 inch.

RESULTS

The yields of cotton on the Tillman County test in 1939 were unusually high, considering the low rainfall which was received. If this test had been planted on a soil of a tight or clay nature, the yields would doubtless have been very much lower. Yields in this test ranged from 339 pounds to 182 pounds of lint per acre, and the gross acre income from all varieties and strains, based on the 1939 staple price differentials of middling cotton, ranged from $36.52 to $22.30. The ten leading varieties ranged in production from 339 pounds to 278 pounds of lint per acre, and had an average production of 293 pounds, as compared to an average of 251 pounds per acre for all strains and varieties included in the test. If the average acre lint production of all varieties included in this test were assumed to be 100 pounds per acre, the average production of the ten best producing varieties and strains would have been 116.7 pounds per acre, and the remaining 62 strains and varieties would have an acre lint yield of 97.2 pounds. The ten leading varieties in this test included one Half-and-Half type, three Deltapine, four Mebane (considering Qualla A-2 as a Mebane type), one Acala 8, and one Acala 5. The average acre income for all varieties and strains included in the test, based on 1939 prices, was $28.27, whereas the corresponding income for the ten highest producers in the test was $32.21. The average staple length (actual) of the ten highest-producing varieties was 31.6 thirty-seconds, while the remaining 62 varieties and strains had an average staple length of 32.4 thirty-seconds. The average staple length of all 72 varieties and strains in the test was 32.3 thirty-seconds, which is about normal. According to the "Character" lint classification of all varieties and strains grown

in the test, 31.9% were classified as "hard" (H), 43.1% as "medium"(M), and 25.0% as "soft" (S). 31.9% of the fibers from the varieties grown in the test were classified as "strong" (S), 48.6% as "medium" (M), and 19.4% as "weak" (W). For most varieties and strains grown in this test, the lint percent was abnormally low and the boll size smaller than normal.

COMANCHE COUNTY TEST

The Comanche County test was conducted in co-operation with the United States Dry Land Field Station, and was located in the northern edge of the city of Lawton. Mr. W. M. Osborn is superintendent of the Station. This test included 72 varieties and strains and was planted on a tight loam soil of medium fertility. The test was planted June 6, 1939, and the soil was in fair condition for planting at this time.

WEATHER CONDITIONS

Table 8 gives the monthly mean and the monthly normal temperature average, and the total monthly rainfall from October, 1938, to September, 1939, inclusive, with the normal precipitation for those months. These data were taken from the weather observation station of the United States Dry Land Field Station, located about one mile from the test.

Table 8. - Temperature and Rainfall Data; Comanche County Test.

MONTH	TEMPERATURE		RAINFALL	
(1938)	Mean	Normal	Total	Normal
October	70.1	63.5	0.50	3.59
November	50.2	51.6	1.63	2.12
December	44.4	41.2	0.42	1.54
(1939)				
January	46.0	39.3	3.01	1.18
February	41.9	42.3	0.33	1.29
March	56.8	52.5	2.18	1.68
April	62.5	61.6	0.18	3.46
May	74.4	69.4	1.08	5.23
June	82.1	78.6	4.87	3.96
July	87.7	82.8	0.89	2.58
August	85.0	82.6	2.10	2.58
September	82.0	75.2	0.00	3.52

From Table 8 it will be noticed that the mean monthly temperature for April was 0.9 degrees above the average normal for that month, and that the

corresponding difference for May was 5.0 degrees. During the growing months of June, July, and August, the average monthly temperature for 1939 was 84.9 degrees, which is 3.6 degrees above the normal.

The amount of moisture received during the fall and winter "storage" months of October, 1938, to March, 1939, inclusive, was 8.07 inches, which is 3.33 inches below normal. During the spring planting months of April and May, 1.26 inches of rainfall were received, which is 7.43 inches below normal. During the growing months of June, July and August, 7.86 inches of rainfall were received, which is 1.26 inches below normal. From these data, it will be seen that the rainfall received during the winter or "storage" months and the spring or "planting" months totalled 9.33 inches, as compared with a normal of 20.09 inches. The total rainfall received during the growing months of June, July, and August was not as deficient as that received during the preceding two periods; however, during these three months, only five days were recorded as having received more than a half-inch of rain. The dates of these rains and the amount recorded are as follows: June 3, 2.20 inches; June 12, 1.02 inches; June 19, 0.60 inch; August 8, 0.80 inch; and August 15, 0.60 inch. It will be noted that no rains of more than a half-inch were received in July, and that, after the 0.60 inch received on June 19th, the biggest rain thereafter was 0.80 inch on August 8th. Due to the rainfall deficiency, and the fact that the sub-soil in the vicinity of Lawton has been dry for some period of time, the crop yields on this test were abnormally low.

RESULTS

Yields of lint cotton on the Comanche County test ranged from 95 pounds to 46 pounds of lint per acre, and the gross acre income for all varieties and strains, based on 1939 staple price differentials of middling cotton, ranged from $10.02 to $5.08. The first ten high-producing varieties of this test ranged from 95 pounds to 78 pounds of lint per acre, and had an average production of 87 pounds per acre, as compared to an average of 68 pounds of lint per acre for all varieties and strains included in the test. If the

average lint production of all varieties and strains included in the test were assumed to be 100 pounds per acre, the average production of the ten best producers would be 127.9 pounds per acre, while the remaining 62 varieties and strains would have an acre lint yield of 95.6 pounds per acre. The first ten placings of varieties and strains included in this test, when comparing yields of lint cotton per acre, included thirteen varieties, due to the fact that four varieties tied for tenth place. Of these thirteen varieties, one was of the Half-and-Half type, one Stoneville, five Mebane, and six Acala 5. The average acre income for all varieties and strains included in the test, based on 1939 prices, was $7.52, while the corresponding income for the ten highest producers in the test was $9.33. The average staple length (actual) of the first ten high-producing varieties was 29.4 thirty-seconds, while the remaining 62 varieties and strains had an average staple length of 29.8 thirty-seconds. The average staple length of all 72 varieties and strains included in the test was 29.7 thirty-seconds, which is below normal. According to the "Character" lint classification of all varieties grown in this test, 8.3% were classified as "hard" (H), 37.5% as "medium" (M), and 54.2% as "soft" (S). 6.9% of the fibers from the varieties grown in the test were classified as "strong" (S), 50.0% as "medium" (M), and 43.1% as "weak" (W). For most varieties and strains grown in this test, the lint percent was abnormally low, and the bolls much smaller than normal.

KIOWA COUNTY TEST

The Kiowa County test was conducted in co-operation with Mr. W. E. Gentry, and was located one and one-quarter miles northwest of Hobart. This test included 40 varieties and strains and was planted on a dark, sandy loam soil of better than average fertility. Planting was done May 25, 1939, and the cotton came up quickly to a good stand.

WEATHER CONDITIONS

Table 9 gives the monthly mean and the average normal temperature, and the total monthly rainfall from October, 1938, to September, 1939, inclusive, with

the normal precipitation shown for those months. These data were taken from the Hobart Weather Observation Station.

Table 9. - Temperature and Rainfall Data; Kiowa County Test.

MONTH (1938)	TEMPERATURE		RAINFALL	
	Mean	Normal	TOTAL	Normal
October	68.0	62.5	0.83	3.04
November	48.4	50.5	2.97	1.66
December	41.3	40.2	0.15	1.34
(1939)				
January	43.0	38.8	4.65	0.76
February	37.5	43.3	0.20	0.96
March	53.4	52.8	1.83	1.58
April	60.0	61.0	1.12	3.10
May	70.9	69.0	2.77	4.64
June	79.6	78.0	5.04	3.61
July	85.5	82.5	0.17	2.54
August	82.2	82.2	1.80	2.17
September	78.8	74.9	0.13	2.91

The mean monthly temperatures for the spring months of April and May were practically normal and the summer growing months of June, July, and August, slightly above normal.

The total rainfall for the period October, 1938, to August, 1939, inclusive, was 21.53 inches compared to a normal of 25.40 inches. The amount of moisture received during the fall and winter "storage" months of October, 1938, to March, 1939, inclusive, was 10.63 inches, or 1.29 inches above normal. During the spring planting months of April and May, 3.89 inches of rain were received, or 3.85 inches less than normal. During the growing months of June, July, and August, 7.01 inches of rainfall were received, which was 1.31 inches less than normal.

RESULTS

As the result of slightly better than normal rainfall during the "storage" months of October, 1938, to March, 1939, inclusive, sufficient rainfall during the planting months of April and May, and practically normal rainfall during the growing months of June, July, and August, a good crop was produced on the Hobart test. Yields in this test ranged from 375 pounds to 227 pounds of lint per acre, and the gross acre income from all varieties

and strains, based on the 1939 staple price differentials of middling cotton, ranged from $38.34 to $24.71. The ten leading varieties ranged in production from 375 pounds to 319 pounds of lint per acre, and had an average production of 341 pounds per acre, as compared to an average of 302 pounds per acre for all strains and varieties included in the test. If the average acre lint production of all varieties and strains included in this test were assumed to be 100 pounds, the average production of the ten best strains and varieties would have been 112.9 pounds per acre, and the remaining 30 strains and varieties would have an acre lint yield of 95.7 pounds. The ten leading varieties in this test included one Half-and-Half type, six Mebane, two Acala 8, and one Rowden. The average acre income, based on 1939 prices, for all varieties and strains included in the test, was $33.00, whereas the corresponding income for the ten highest producers in the test was $36.24. The average staple length (actual) of the ten highest-producing varieties was 30.5 thirty-seconds, while the remaining 30 varieties and strains had an average staple length of 31.1 thirty-seconds. The average staple length of all 40 varieties and strains included in this test was 31.0 thirty-seconds, which is about normal. According to the "Character" lint classification of all varieties and strains grown in this test, 25.0% were classified as "hard" (H), 40.0% as "medium" (M), and 35.0% as "soft" (S). 35.0% of the fibers from the varieties grown in this test were classified as "strong" (S), 37.5% as "medium" (M), and 27.5% as "weak" (W). For most varieties and strains grown in this test, the lint percent was considerably lower than is usually expected, and the bolls smaller.

WASHITA COUNTY TEST

The Washita County test was conducted in co-operation with Mr. Fred Amen, and was located one and one-half miles north of Cordell. This test included 40 varieties and strains and was planted on a tight-natured, light, sandy loam of medium fertility. The test was planted May 25, 1939.

WEATHER CONDITIONS

Due to the fact that weather records from Cordell were not available for

longer than a two-year period, weather data is quoted on the basis of observations made at Cloud Chief over a period of 37 years. Cloud Chief is about twelve miles southeast from Cordell. Table 10 gives the monthly mean and the average normal temperature and the monthly total and normal rainfall from Cloud Chief, and the monthly total rainfall for Cordell, from October, 1938, to September, 1939, inclusive.

Table 10. - Temperature and Rainfall Data; Washita County Test.

MONTH (1938)	(Cloud Chief) TEMPERATURE Mean	Normal	(Cloud Chief) RAINFALL Total	Normal	CORDELL TOTAL RAINFALL
October	67.1	62.3	0.55	3.48	0.66
November	48.7	50.7	1.96	1.85	2.55
December	40.5	39.5	0.12	1.30	0.22
(1939)					
January	43.6	38.1	3.07	0.69	2.91
February	38.2	42.5	0.11	1.00	0.10
March	53.1	52.4	1.40	1.82	1.37
April	60.6	60.4	0.89	3.34	1.03
May	71.6	68.1	1.65	4.56	1.56
June	80.3	77.4	7.26	3.45	6.42
July	85.4	82.3	1.84	3.02	0.16
August	82.2	81.5	3.32	2.23	1.60
September	79.6	74.4	0.04	3.14	0.58

The mean temperature for April at Cloud Chief was practically normal, and for May was 3.5 degrees above normal. The average mean temperature for the growing months of June, July, and August, was 82.6 degrees, which was 2.2 degrees above normal. The total average normal rainfall at Cloud Chief during the fall and winter "storage" months of October to the following March is 10.14 inches. During this period (October, 1938, to March, 1939, inclusive), the total rainfall received at the Cloud Chief Station was 7.21 inches, and at Cordell, 7.71 inches. The total normal rainfall at Cloud Chief for the months of April and May is 7.90 inches, whereas the total for these months in 1939 as recorded by the Cloud Chief Station was 2.54 inches, and the Cordell Station recorded 2.67 inches. The normal rainfall for the growing months of June, July and August at the Cloud Chief Station is 8.70 inches. During these months in 1939, the Cloud Chief Station recorded 12.42 inches, or 3.72 inches more than normal, whereas the Cordell Station

recorded 8.18 inches, or 0.52 inch below the Cloud Chief normal. At the Cordell Station in 1939, there was thus recorded 10.85 inches of rainfall received during the months of April to August, inclusive, which is 5.75 inches below the Cloud Chief normal. During the months of April and May at Cordell, the largest single day's record of rain was 0.70 inch, and, while there were eleven days of rainfall recorded during these two months, the total for the days ranged from only 0.01 to 0.70 inch. During the month of June, rainfall recorded at the Cordell Station was very beneficial to cotton in that 2.40 inches were received on the twelfth, and 3.06 inches on the twenty-first. After June 21st, only one beneficial rain was recorded at the Cordell Station, and this was on August 8th, when 1.08 inches were received. The crop at Cordell was therefore grown under conditions of a dry sub-soil due to the deficiency of rainfall during the months of October, 1938, to March, 1939, inclusive, dry spring planting months of April and May, when the largest total daily rainfall was 0.70 inch, heavy rainfall during the month of June, after which the only recorded rain of any significance was received on the eighth of August. This latter rainfall was insufficient to be of much benefit to the crop.

RESULTS

As the result of insufficient rainfall, yields on the strains and varieties grown in the Washita County test were very low, ranging from 89 pounds to 41 pounds of lint per acre. The gross acre income of all varieties and strains, based on the 1939 staple price differentials of middling cotton, ranged from $9.58 to $3.83. The ten leading varieties ranged in production from 89 to 72 pounds of lint per acre, and had an average lint yield of 78 pounds per acre, as compared to an average of 62 pounds per acre for all strains and varieties included in the test. If the average lint production of all varieties included in this test were assumed to be 100 pounds per acre, the average production of the ten best-producing varieties and strains would be 125.8 pounds per acre, and the remaining 30 varieties and strains would

have an average acre yield of 91.9 pounds. The ten leading varieties included one Half-and-Half type, one Deltapine, three Stoneville, two Mebane, one Acala 8, one Acala 5, and one Lone Star. The average acre income for all varieties and strains included in the test, based on 1939 prices, was $6.50, whereas the corresponding income for the ten highest producers in the test was $7.92. The average staple length (actual) of the ten highest-producing varieties was 28.4 thirty-seconds, while the remaining 30 varieties and strains had an average staple length of 28.9 thirty-seconds. The average staple length of all 40 varieties and strains included in the test was 28.8 thirty-seconds, which is considerably below normal. According to the "Character" lint classification of all varieties and strains grown in the test, none were classified as "hard" (H), 27.5% were classified as "medium" (M), and 72.5% as "soft" (S). 2.5% of the fibers from the varieties grown in the test were classified as "strong" (S), 35.0% as "medium" (M), and 62.5% as "weak" (W). For most varieties and strains grown in this test, the lint percent was somewhat lower than is usually expected, and the bolls much smaller than normal.

TABLE 11.
COTTON VARIETY TEST, 1939
PERKINS, PAYNE COUNTY, OKLAHOMA

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif
1	Half & Half X Lone Star	509	794	1303	$46.37	14	$64.04	39.1	70	26-26	1	H	S	G
2	Deltapine A	488	882	1370	52.50	2	68.60	35.6	94	31-31	1	H	S	G
3	Deltapine 12	480	899	1379	51.96	3	67.86	34.8	96	31-31	2	M	M	M
4	Stoneville 5A	479	1046	1525	53.81	1	70.60	31.4	106	33-32	2	M	M	M
5	Stoneville 2B	467	997	1464	51.77	4	67.49	31.9	80	32-31	2	M	M	M
6	Western Mebane 140	464	817	1281	43.20	30	59.49	36.2	77	26-26	1	H	S	G
7	Summerour's Hi-Bred	460	725	1185	41.98	37	57.97	38.8	77	26-26	1	M	M	G
8 t	Watson	459	848	1307	47.72	9	62.14	35.1	64	29-28	1	S	W	W
8 t	Acala 892	459	863	1322	49.25	5	63.93	34.7	77	30-30	1	H	S	G
10	Ambassador (Stoneville 4B)	446	965	1411	49.12	6	63.63	31.6	80	31-30	2	M	M	M
11	Mebane 804-36	442	853	1295	46.98	12	61.03	34.1	79	30-29	1	M	M	G
12	Western Early	436	876	1312	47.78	8	62.35	33.2	89	31-31	1	H	S	G
13 t	Startex 619	434	917	1351	47.58	10 t	61.65	32.1	81	31-30	1	H	S	G
13 t	Oklahoma Triumph 8	434	917	1351	47.58	10 t	61.65	32.1	88	30-30	1	H	S	G
15	Washington(Delfos 719)(Stone)	431	898	1329	47.99	7	63.02	32.4	78	32-32	3	M	M	G
16	D & P L 7063A-44-51	429	752	1181	45.92	16	60.03	36.3	89	31-31	1	H	S	G
17	Ferguson's 406	428	836	1264	46.24	15	59.98	33.9	103	30-30	1	M	M	G
18 t	Western Mebane 141	427	841	1268	44.92	20	58.43	33.7	77	28-28	1	H	M	G
18 t	Northern Star 101	427	819	1246	46.41	13	60.60	34.3	78	31-31	1	H	S	G
20	Oklahoma Triumph 32	424	914	1338	45.39	18	58.97	31.7	82	29-28	2	S	W	W
21	Cliett's Superior	417	741	1158	43.06	32	56.09	36.0	66	30-28	2	S	W	W
22	Original Mebane Triumph	416	766	1182	43.85	25	56.99	35.2	86	29-29	1	S	W	M
23	Roldo Rowden	415	862	1277	44.73	21	58.02	32.5	69	29-29	1	H	S	G
24	New Boykin	414	773	1187	43.75	26	56.85	34.9	71	29-29	2	M	M	G
25	Rogers' Acala 111	413	796	1209	45.75	17	60.72	34.2	77	33-33	1	H	S	G
26	Caddo	409	847	1256	44.67	22	57.89	32.6	82	30-30	1	H	M	M
27 t	Bryant's Mebane	407	769	1176	43.10	31	55.99	34.6	65	30-29	1	M	M	M
27 t	Mebane 804-50	407	862	1269	39.35	54	53.93	32.1	90	28-26	1	S	W	W

TABLE 11, (PAYNE COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
29 t	Rowden 41-A	403	808	1211	$44.15	23	$57.62	33.3	69	31-31	1	H	S	G
29 t	Acala 8 (Cal.Poso Found.)	403	787	1190	43.54	28	56.47	33.9	73	33-30	2	S	W	W
31	Sunshine 83-3	398	923	1321	45.25	19	59.32	30.1	67	32-32	1	H	S	G
32	Oklahoma Triumph 5	395	863	1258	43.98	24	57.33	31.4	96	31-31	1	H	S	G
33	Bagley's Mebane	394	734	1128	42.60	33	55.66	34.9	66	32-31	1	M	M	M
34	Paymaster	393	875	1268	43.53	29	56.36	31.0	71	31-30	2	M	M	M
35	Oklahoma Triumph 67	392	857	1249	43.65	27	56.89	31.4	78	31-31	1	M	M	G
36 t	Harper's Family U(Regular)	389	768	1157	41.52	41	53.92	33.6	58	31-29	3	S	W	W
36 t	D & P L 7063 A-33-43	389	679	1068	41.22	45	53.55	36.4	103	30-30	1	H	S	G
38 t	Kasch	387	748	1135	41.73	39	54.14	34.1	64	31-30	2	S	W	W
38 t	Lankart #94	387	724	1111	41.49	42	53.85	34.8	58	30-30	1	H	S	G
40	Rowden 41-B	386	804	1190	42.59	34	55.55	32.4	67	31-31	1	H	S	G
41 t	Qualla X-2 (Regular)	384	720	1104	41.18	46	53.45	34.8	64	31-30	2	M	M	G
41 t	Wacona #48	384	728	1112	41.65	40	54.40	34.5	64	31-31	1	M	M	G
41 t	Acala 8 (Cal. Yel. Label)	384	745	1129	42.20	36	55.48	34.0	75	33-32	2	VS	M	M
44	Rowden 5056	383	791	1174	41.23	44	53.50	32.6	87	29-29	1	M	M	G
45	Calcala	378	768	1146	42.27	35	56.05	33.0	84	34-33	1	H	S	M
46	Acala 5 (Hunt)	377	811	1188	41.47	43	53.73	31.7	88	30-30	1	H	M	G
47	Sunshine 74-2	374	849	1223	41.96	38	54.66	30.6	74	31-31	1	H	S	G
48	Acala 5 (Jones)	372	825	1197	41.17	47	53.31	31.2	82	30-30	2	H	S	G
49	Acala 8 (Okla. B.L. Inc.)	367	734	1101	40.19	51	52.45	33.3	70	34-31	2	S	W	W
50	Qualla A-2	365	722	1087	40.62	49	53.88	33.6	74	33-33	2	H	S	G
51	Lone Star (Gorham)	362	738	1100	39.42	53	51.11	32.9	64	30-30	2	H	M	M
52 t	Acala 8 (Okla. Y.L. Inc.)	361	727	1088	40.30	50	53.45	33.2	76	34-33	2	M	M	M
52 t	Lyon's Acala 8	361	702	1063	39.69	52	52.17	34.0	73	33-32	3	S	M	M
54	Harper's Family B L	360	740	1100	40.70	48	54.46	32.7	70	34-34	1	H	S	G
55	Acala 8 (Okla. Fnd. Inc.)	343	678	1021	37.48	55	48.92	33.6	78	32-31	2	M	M	M
56	Spears' Upland Long Staple	267	702	969	31.72	56	42.22	27.6	82	36-34	2	M	M	G

(1) The first figure indicates ACTUAL length -- the second, VALUE length (in 32nds of an inch.)

t - tie (rank columns)

TABLE 12
COTTON VARIETY TEST, 1939
PORTER, WAGONER COUNTY, OKLAHOMA

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
1	Oklahoma Triumph 8	1056	2283	3342	$118.43	1	$135.42	31.6	60	32-32	1	M	S	M
2	Deltapine 12	1047	1862	2909	112.33	4	146.83	36.0	68	32-31	2	S	M	M
3	Rowden 5056	1024	2138	3162	113.03	3	147.41	32.4	55	31-31	1	H	S	G
4	D & P L 7063A-44-51	1021	1832	2853	114.29	2	154.20	38.8	75	35-35	1	H	S	G
5	Washington(Delfos 719)(Stone)	983	1918	2901	108.14	6	142.16	33.9	63	32-32	1	M	M	G
6	Stoneville 2B	971	2170	3141	111.52	5	148.97	30.9	63	34-34	1	M	M	M
7	Stoneville 5A	964	1798	2762	106.19	7	141.02	34.9	64	33-33	1	H	S	G
8	Oklahoma Triumph 5	941	2096	3037	104.24	9	134.96	31.0	72	30-30	1	H	S	G
9	Half & Half X Lone Star	940	1451	2391	94.88	17	123.82	39.3	64	28-28	1	M	M	M
10	D & P L 7063A-33-43	927	1557	2484	99.46	16	131.03	37.3	75	32-32	1	M	M	M
11	Northern Star 101	926	1806	2732	100.01	15	129.73	33.9	58	30-30	1	H	S	G
12	Deltapine A	923	1655	2578	101.00	14	134.22	35.8	81	33-33	1	M	S	M
13	Oklahoma Triumph 32	921	2118	3039	104.53	8	137.05	30.3	68	32-32	1	H	S	G
14	Oklahoma Triumph 67	908	2013	2921	101.40	12	132.12	31.1	74	31-31	1	M	M	G
15	Ambassador (Stone. 4-B)	903	2011	2914	102.73	11	130.01	31.0	54	33-33	1	H	S	G
16 t	Roldo Rowden	891	2141	3032	102.94	10	136.08	29.4	53	33-33	1	H	S	G
16 t	Acala 5 (Hunt)	891	1956	2847	101.09	13	133.86	31.3	55	33-33	1	H	S	G
18	Cliett's Superior	874	1482	2356	92.17	19	119.78	37.1	58	30-30	1	H	S	G
19	Summerour's Hi-Bred	863	1402	2265	89.10	23	115.98	38.1	61	29-29	1	M	M	G
20	Acala 892	850	1622	2472	93.15	18	122.48	34.4	61	32-32	1	H	S	G
21	Ferguson's 406	845	1589	2434	91.52	20	119.54	34.7	57	31-31	1	H	M	G
22	Wacona #48	806	1614	2420	89.08	24	117.06	33.3	54	32-32	1	M	M	M
23	Paymaster	803	1780	2583	91.27	21	120.85	31.1	68	33-33	1	H	S	G
24	Rogers' Acala 111	794	1680	2474	90.25	22	120.68	32.1	61	34-34	1	H	S	G
25	Acala 5 (Jones)	792	1645	2437	86.54	27	112.17	32.5	62	30-30	1	S	M	M
26	Harper's Family B L	784	1627	2411	88.79	25	118.77	32.5	60	34-34	2	M	M	M
27	Qualla A-2	776	1453	2229	84.76	28	111.49	34.8	59	33-32	2	M	M	M

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE				LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR VALUE	AVE. TOTAL			(1) Length	Nep	Char	Stgth	Unif.
28	Acala 8 (Cal. Yel. Label)	751	1438	2189	$83.85	29		$112.34	34.3	57	34-34	1	H	S	G
29	Bagley's Mebane	737	1382	2119	81.26	30		107.89	34.8	48	33-33	1	H	S	G
30	Qualla X-2 (Regular)	736	1409	2145	80.70	31		106.11	34.3	49	32-32	1	M	M	G
31	Lankart #94	735	1382	2117	80.34	32		105.66	34.7	65	32-32	1	M	M	G
32	Spears' Upland Long Staple	731	1806	2537	88.60	26		118.53	28.8	60	36-36	1	H	S	G
33	New Boykin	704	1354	2058	76.55	33		99.96	34.2	65	31-31	1	M	S	G
34	Acala 8 (Okla. Y.L. Inc.)	682	1277	1959	75.17	34		101.66	34.8	56	34-34	1	M	M	G
35	Acala 8 (Okla. Fnd. Inc.)	678	1300	1978	75.04	35		99.60	34.3	60	33-33	2	M	M	M
36	Bryant's Mebane	667	1238	1905	72.08	36		94.17	35.0	50	31-31	1	M	M	G
37	Calcala	642	1251	1893	71.90	37		96.29	33.9	59	34-34	1	M	M	M
38	Lyon's Acala 8	630	1176	1806	70.04	39		93.87	34.9	60	34-34	1	M	S	G
39	Acala 8 (Cal. Poso Found.)	627	1217	1844	~~30.17~~	38		93.98	34.0	60	34-34	1	H	S	G
40	Original Mebane Triumph	593	1145	1738	65.12	40		85.61	34.1	53	32-32	1	H	S	M

(1) The first figure indicates ACTUAL Length, the second VALUE Length (both in 32nds of an inch.)

t - tie (rank columns)

"1939 Total Gross Value Per Acre
for Acala 8 (Cal. Poso Found.)
should be $70.17."

TABLE 13
COTTON VARIETY TEST, 1939
CANADIAN, PITTSBURG COUNTY, OKLAHOMA

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
1	D & P L 7063A-33-43	495	716	1211	$51.96	1	$68.58	40.9	91	32-32	1	M	M	M
2	Deltapine 12	470	707	1177	50.08	2	66.71	39.9	102	33-33	1	H	S	G
3	Western Mebane 140	452	690	1142	46.90	4	61.03	39.6	81	30-30	1	M	M	M
4	Ambassador (Stone. 4B)	443	783	1226	48.81	3	65.48	36.1	75	34-34	1	M	S	G
5 t	D & P L 7063A-44-51	436	614	1050	45.60	7	60.21	41.5	84	32-32	1	H	S	G
5 t	Half & Half X Lone Star	436	602	1038	43.30	11	56.58	42.0	67	28-28	1	H	S	G
7	Stoneville 2B	426	783	1209	46.81	5	62.18	35.2	84	33-33	1	H	S	G
8	Wacona #48	422	722	1144	45.41	8	59.81	36.9	64	32-32	1	H	S	G
9	Deltapine A	419	649	1068	44.83	9	59.70	39.2	84	33-33	1	H	S	G
10	Washington(Delfos 719)(Stone)	418	784	1202	45.67	6	60.07	34.8	75	32-32	1	M	M	M
11	Summerour's Hi-Bred	416	544	960	36.85	45 t	51.08	43.3	89	26-26	1	H	M	M
12	Rowden 41-B	409	714	1123	44.15	10	58.14	36.4	62	32-32	1	H	S	G
13 t	Original Mebane Triumph	405	673	1078	42.98	14	56.23	37.6	62	31-31	1	H	S	G
13 t	Rowden 5056	405	741	1146	43.25	12	56.15	35.3	67	30-30	1	H	S	G
13 t	Stoneville 5A	405	699	1104	43.24	13	56.54	36.7	94	31-31	1	M	M	M
16	Rowden 41-A	399	716	1115	42.87	15	56.03	35.8	70	31-31	1	H	S	G
17	Watson	395	665	1060	41.61	19	54.08	37.3	65	30-30	1	H	S	G
18 t	New Boykin	389	627	1016	40.70	24	52.92	38.3	69	30-30	1	M	M	G
18 t	Sunshine 83-3	389	769	1158	42.51	16	55.48	33.6	62	31-31	1	H	S	G
20	Acala 5 (Hunt)	388	705	1093	42.16	17	55.49	35.5	88	32-32	1	H	S	G
21	Qualla X-2 (Regular)	385	601	986	40.85	22	53.87	39.0	57	32-32	1	H	S	G
22	Oklahoma Triumph 8	384	755	1139	41.92	18	54.72	33.7	90	31-31	1	M	M	M
23 t	Bryant's Mebane	380	593	973	39.94	28	52.30	39.1	58	32-31	1	M	M	G
23 t	Ferguson's 406	380	618	998	39.81	29	51.77	38.1	74	30-30	1	M	M	M
25	Bagley's Mebane	379	618	997	40.10	27	52.48	38.0	58	31-31	1	M	M	M
26 t	Mebane 804-50	378	687	1065	41.08	21	54.05	35.5	82	32-32	1	M	M	M
26 t	Mebane 804-36	378	749	1127	41.32	20	53.93	33.5	86	31-31	1	M	M	G
28	Startex 619	375	706	1081	40.62	25	53.06	34.7	74	31-31	1	H	S	G

TABLE 13, (PITTSBURG COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
29	Roldo Rowden	373	733	1106	$40.71	23	$53.15	33.7	61	31-31	1	H	S	G
30	Kasch	372	581	953	38.73	38	50.38	39.0	59	30-30	1	M	M	M
31 t	Western Mebane 141	369	622	991	38.88	37	50.52	37.2	76	30-30	1	H	S	G
31 t	Lone Star (Gorham)	369	675	1044	39.78	30	51.97	35.3	56	31-31	1	H	S	G
33	Western Early	368	690	1058	40.57	26	53.88	34.8	92	33-33	1	H	S	G
34 t	Lankart #94	367	550	917	38.35	39	50.24	40.0	52	31-31	1	M	M	G
34 t	Acala 892	367	644	1011	38.92	36	50.56	36.3	68	30-30	1	M	S	G
36 t	Harper's Family B L	362	565	927	39.14	35	52.61	39.1	71	34-34	1	H	S	G
36 t	Caddo	362	649	1011	39.25	32	51.66	35.8	81	32-32	1	M	M	G
36 t	Oklahoma Triumph 32	362	684	1046	39.24	33	51.25	34.6	81	31-31	1	H	S	G
39	Rogers' Acala 111	359	635	994	39.20	34	52.10	36.1	75	33-33	1	H	S	G
40 t	Northern Star 101	357	594	951	38.25	40	50.40	37.5	71	32-32	1	H	S	G
40 t	Sunshine 74-2	357	736	1093	39.31	31	51.28	32.7	75	31-31	1	H	S	G
42	Oklahoma Triumph 67	352	695	1047	37.57	43	48.78	33.6	88	29-29	1	H	S	G
43	Cliett's Superior	350	534	884	36.32	48	47.26	39.6	65	30-30	1	S	M	W
44	Acala 8 (Cal. Poso Found.)	345	576	921	37.67	42	50.59	37.5	74	34-34	1	S	M	G
45	Paymaster	344	663	1007	37.76	41	49.65	34.2	85	32-32	1	M	M	M
46	Acala 8 (Cal. Yel. Label)	342	587	929	37.51	44	50.34	36.8	64	34-34	1	H	S	G
47	Qualla A-2	339	574	913	36.08	51	47.20	37.1	71	33-31	2	S	M	W
48	Acala 5 (Jones)	338	627	965	36.18	50	46.96	35.0	80	30-30	1	M	M	G
49	Acala 8 (Okla. Found. Inc.)	336	577	913	36.85	45 t	49.46	36.8	75	34-34	1	H	S	G
50	Acala 8 (Okla. Y. L. Inc.)	333	576	909	36.56	47	49.07	36.6	77	34-34	1	H	S	G
51	Lyon's Acala 8	331	557	888	36.19	49	48.58	37.3	71	34-34	1	H	S	M
52	Harper's Family U (Reg.)	328	579	907	35.15	53	45.95	36.2	57	31-31	1	H	S	G
53	Acala 8 (Okla. B Label Inc.)	327	560	887	35.85	52	48.12	36.9	74	34-34	1	H	S	G
54	Oklahoma Triumph 5	322	652	974	35.02	54	45.40	33.1	90	31-30	1	M	M	M
55	Calcala	321	559	880	34.96	55	46.48	36.5	76	34-33	1	M	M	M
56	Spears' Upland Long Staple	298	633	931	33.90	56	45.33	32.0	85	34-34	1	H	S	G

(1) The first figure indicates ACTUAL length, the second - VALUE length (in 32nds of an inch.)
t - tie (rank columns)

TABLE 14

COTTON VARIETY TEST, 1939

ADA, PONTOTOC COUNTY, OKLAHOMA

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	SEEDS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AV. VALUE TOTAL			(1) Length	Nep	Har	Strgth	Unif.
1	Rowden 41-A	242	458	700	$26.00	1	$33.74	34.5	74	30-30	1	H	S	G
2	Acala 892	229	424	653	24.16	3	31.40	35.0	79	30-29	1	M	M	M
3	Stoneville 5A	224	446	670	24.28	2	31.49	33.5	97	29-29	1	M	M	M
4	Wacona #48	218	395	613	23.24	4	30.18	34.6	7	29-29	2	S	W	W
5	Half & Half K Lone Star	215	326	541	18.31	36	25.41	30.7	96	24-24	1	S	W	W
6	Sunshine 83-3	211	429	640	22.96	5	29.77	32.0	74	30-30	1	M	M	M
7	New Boykin	210	349	559	21.45	11	27.96	37.0	87	29-28	1	S	W	W
8	Qualla A-2	209	352	561	22.02	6	28.61	37.2	101	31-30	2	M	M	M
9 t	Northern Star 101	206	362	568	21.85	7	28.38	36.3	90	30-30	1	M	M	M
9 t	Rowden 5056	206	389	595	21.50	10	27.99	34.7	86	29-29	1	H	S	G
9 t	D & P L 7063A-44-51	206	332	538	21.76	8	28.47	38.2	111	31-31	1	H	S	G
12	Mebane 804 - 36	204	362	566	21.06	15	27.43	36.0	97	29-28	1	S	W	W
13	D & P L 7063A-33-43	203	334	537	21.31	12	27.70	37.8	107	31-31	1	M	M	M
14 t	Original Mebane Triumph	202	326	528	20.53	20	26.87	38.2	94	29-29	1	S	W	W
14 t	Mebane 804-50	202	384	586	21.11	14	27.48	34.4	91	28-28	1	M	M	G
16 t	Ferguson's 406	200	332	532	18.42	35	25.40	37.5	91	26-26	1	S	W	W
16 t	Roldo Rowden	200	413	613	21.53	9	27.94	32.7	73	29-29	1	H	S	G
18	Deltapine A	197	334	531	20.77	18	27.00	37.1	117	30-30	1	H	S	G
19	Summerour's Hi-Bred	196	306	502	17.66	39 t	24.66	38.1	101	28-28	1	S	W	W
20	Oklahoma Triumph 8	194	425	619	21.13	13	27.39	31.4	100	29-29	1	M	M	M
21	Acala 5 (Hunt)	193	406	599	20.85	17	27.05	33.2	100	29-29	1	H	S	G
22	Oklahoma Triumph 5	192	421	613	20.91	16	27.11	31.3	106	29-29	1	M	M	M
23 t	Washington(Delfos 719)(Stone)	191	430	621	20.63	19	26.78	30.7	96	28-28	2	S	W	W
23 t	Oklahoma Triumph 67	191	393	584	20.26	21	26.34	32.7	95	29-29	1	S	M	M
25	Rowden 41-B	188	367	555	20.03	22	26.00	33.9	70	29-29	1	H	S	G
26	Lankart #94	187	290	477	19.17	27	24.97	39.1	70	30-29	1	S	M	M
27	Watson	185	315	500	18.97	29	24.72	37.0	77	28-28	1	S	W	M
28 t	Deltapine 12	184	310	494	19.38	26	25.19	37.3	112	30-30	1	M	S	G

TABLE 14, (PONTOTOC COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
28 t	Calcala	184	311	495	$19.39	24 t	$25.20	37.2	83	30-30	1	M	M	M
30	Caddo	182	388	570	19.99	23	25.90	32.0	83	30-30	2	M	M	M
31	Ambassador (Stone. 4B)	181	391	572	19.39	24 t	25.18	31.6	82	29-28	1	S	W	W
32	Acala 5 (Jones)	179	356	535	19.13	28	24.84	33.5	99	29-29	1	S	W	M
33	Kasch	178	284	462	18.59	34	24.18	38.6	69	30-30	1	S	W	W
34	Acala 8 (Cal. Yel. Label)	177	304	481	18.70	32	24.31	36.7	86	32-30	2	S	W	W
35 t	Stoneville 2B	175	376	551	18.72	31	24.32	31.8	98	29-28	2	S	W	W
35 t	Acala 8 (Okla. B.L. Inc.)	175	299	474	18.65	33	24.40	36.9	97	31-31	1	H	S	M
37	Oklahoma Triumph 32	174	377	551	18.91	30	24.51	31.5	100	29-29	1	H	S	G
38	Qualla X-2 (Regular)	172	272	444	17.43	42	22.73	38.8	74	28-28	1	M	M	M
39	Rogers' Acala 111	171	302	473	18.15	38	23.58	36.1	96	30-30	1	M	W	M
40	Sunshine 74-2	169	354	523	18.24	37	23.67	32.3	77	30-29	1	S	W	M
41	Cliett's Superior	168	251	419	15.19	46	21.00	40.1	78	28-26	1	S	W	W
42	Lyon's Acala 8	167	291	458	17.86	39 t	23.35	36.5	105	31-31	1	M	M	M
43	Acala 8 (Okla. Y.L. Inc.)	166	272	438	17.58	41	23.00	37.8	94	31-31	1	H	S	G
44 t	Harper's Family U (Reg.)	160	259	419	16.27	44	21.22	38.3	80	28-28	1	S	W	M
44 t	Acala 8 (Okla. Fnd. Inc.)	160	270	430	17.18	43	22.63	37.1	93	32-32	1	H	M	G
46	Spears' Upland Long Staple	140	319	459	16.00	45	21.18	30.4	100	33-33	1	H	S	G

(1) The first figure indicates ACTUAL length, the second - VALUE length (in 32nds of an inch.)

t - tie (rank columns)

TABLE 15
COTTON VARIETY TEST, 1939
TISHOMINGO, JOHNSTON COUNTY, OKLAHOMA

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
1	Summerour's Hi-Bred	329	492	821	$29.76	20	$41.14	40.1	87	26-26	1	H	S	G
2 t	Oklahoma Triumph 5	325	669	994	35.45	1	45.96	32.7	105	30-30	1	H	S	G
2 t	Half & Half X Lone Star	325	510	835	29.64	22	40.93	38.9	84	26-26	1	H	S	G
4	D & P L 7063A-44-51	324	521	845	34.86	2	46.39	38.4	86	33-33	1	M	M	M
5	Acala 892	319	566	885	33.89	5	44.02	36.1	78	30-30	1	H	S	M
6 t	D & P L 7063A-33-43	318	522	840	33.68	7	44.07	37.8	94	31-31	1	H	S	G
6 t	Oklahoma Triumph 8	318	640	958	34.54	3	44.79	33.2	96	30-30	1	M	M	G
8	Oklahoma Triumph 32	317	641	958	33.99	4	44.11	33.1	88	29-29	1	M	M	M
9	Ambassador (Stoneville 4B)	308	624	932	33.81	6	44.11	33.0	67	31-31	1	H	S	G
10	Acala 8 (Cal. Yel. Label)	303	554	857	33.26	9	44.19	35.3	76	33-33	1	S	M	G
11	Stoneville 2B	297	618	915	33.65	8	45.02	32.5	85	34-34	1	H	S	G
12	Deltapine A	296	546	842	32.54	10	43.22	35.2	68	33-33	1	M	M	G
13	New Boykin	295	508	803	30.75	13	40.00	36.7	74	29-29	1	S	W	W
14	Deltapine 12	293	523	816	31.45	12	41.12	35.9	101	31-31	1	M	M	M
15	Acala 5 (Hunt)	291	586	877	31.90	11	41.63	33.2	86	31-31	1	M	S	G
16	Qualla A-2	282	526	808	30.50	15	39.84	34.9	80	31-31	1	S	M	M
17	Rowden 5056	280	571	851	30.07	16	39.02	32.9	78	29-29	1	H	S	G
18	Ferguson's 406	279	503	782	29.72	21	38.60	35.7	78	30-30	1	M	M	M
19	Sunshine 74-2	277	614	891	30.65	14	39.70	31.1	72	30-30	1	H	S	G
20	Acala 8 (Okla. Fnd. Inc.)	274	503	777	29.83	18 t	39.25	35.2	79	34-32	2	S	W	W
21 t	Watson	271	523	794	29.21	26	37.91	34.1	67	30-30	1	S	M	M
21 t	Acala 5 (Jones)	271	558	829	29.83	18 t	38.92	32.7	96	31-31	1	H	S	M
23	Oklahoma Triumph 67	270	602	872	29.92	17	38.73	31.0	88	30-30	1	H	S	G
24	Acala 8 (Cal. Poso Found.)	266	489	755	29.50	23	39.55	35.2	73	34-34	1	M	S	G
25 t	Sunshine 83-3	265	577	842	29.22	25	37.85	31.5	76	30-30	1	H	S	G
25 t	Washington(Delfos 719)(Stone)	265	568	833	29.40	24	38.33	31.8	84	31-31	1	M	M	M
27	Stoneville 5A	257	498	755	27.98	27	36.54	34.0	94	31-31	1	M	M	M

TABLE 15, (JOHNSTON COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
28	Roldo Rowden	254	525	779	$27.73	28	$35.94	32.6	69	30-30	1	H	S	G
29	Lyon's Acala 8	250	456	706	27.44	29	36.45	35.4	78	33-33	1	S	M	M
30	Northern Star 101	246	459	705	26.85	30	35.33	34.9	69	32-32	1	S	M	M
31	Qualla X-2 (Regular)	239	407	646	25.94	31	34.49	37.0	67	33-33	1	S	M	M
32	Original Mebane Triumph	237	428	665	25.73	32	33.86	35.6	64	32-32	1	M	M	G
33	Lankart #94	234	407	641	25.25	33	33.24	36.5	60	32-32	1	M	M	M
34	Kasch	228	392	620	24.10	36	31.31	36.8	65	30-30	1	S	M	M
35	Wacona #48	226	432	658	24.32	34	31.55	34.3	64	32-30	1	M	M	W
36	Calcala	219	412	631	24.16	35	32.07	34.7	77	33-33	1	S	M	M
37	Spears' Upland Long Staple	199	494	693	23.35	37	31.12	28.7	88	36-34	1	S	M	M

(1) The first figure indicates ACTUAL length, the second -- VALUE length (in 32nds of an inch.)

t - tie (rank columns)

TABLE 16
COTTON VARIETY TEST, 1939
TIPTON, TILLMAN COUNTY, OKLAHOMA

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
1	Half & Half X Lone Star	339	604	943	$35.02	2	$45.62	36.0	87	28-28	1	S	W	W
2	Watson	332	681	1013	36.52	1	47.64	32.8	65	31-31	1	H	S	M
3	Western Mebane 140	289	575	864	30.89	12	40.11	33.4	86	29-29	1	H	S	G
4 t	Deltapine 12	283	585	868	30.90	10 t	40.05	32.6	120	31-30	2	S	W	W
4 t	D & P L 7063A-33-43	283	548	831	30.81	14	40.23	34.0	101	31-31	1	H	S	M
6	Acala 33-4	281	679	960	32.50	4	42.97	29.3	91	33-33	1	M	M	M
7	D & P L 7063A-44-51	280	572	852	31.62	5	42.31	32.9	104	34-34	1	H	S	M
8 t	Qualla A-2	279	589	868	31.42	7	41.64	32.1	74	34-33	2	M	S	M
8 t	Acala College Increase	279	599	878	31.52	6	41.76	31.8	76	33-33	1	M	M	M
10	Oklahoma Triumph 67	278	571	849	30.87	13	40.54	32.8	111	32-32	1	H	S	G
11 t	Summerour's Hi-Bred	273	476	749	25.37	62	34.95	36.4	102	26-26	1	H	M	G
11 t	Rogers' Acala 111	273	619	892	30.90	10 t	40.52	30.6	104	32-32	1	M	S	M
13	Acala 31-91	272	698	970	32.55	3	43.60	28.0	81	35-35	1	H	S	G
14	Oklahoma Triumph 5	270	614	884	30.31	15	39.47	30.5	110	32-31	1	H	M	M
15 t	Ferguson's 406	269	541	810	29.22	25	37.88	33.2	77	30-30	1	M	M	G
15 t	Farm Relief	269	572	841	29.80	20	38.84	32.0	91	33-31	2	S	W	W
15 t	Acala 33-23	269	645	914	31.06	8	41.07	29.4	90	33-33	1	M	S	G
18	Qualla X-2 (Regular)	268	541	809	29.93	17	39.70	33.1	67	33-33	1	H	S	G
19	Lankart #94	267	506	773	29.76	21	39.87	34.6	63	34-34	1	M	M	G
20	Acala 2105	266	565	831	29.19	27	37.82	32.0	88	30-30	1	S	W	W
21	Washington(Delfos 719)(Stone)	265	669	934	30.94	9	40.86	28.4	91	33-33	1	M	M	M
22	New Boykin	264	500	764	27.57	44	35.88	34.5	88	29-28	2	S	W	W
23	Northern Star 101	263	562	825	29.68	22	39.33	31.9	84	33-33	1	M	S	G
24 t	Acala 8 (Cal. Yel. Label)	262	554	816	29.51	23	39.11	32.1	78	33-33	1	M	M	M
24 t	Nucala	262	585	847	29.82	19	39.48	30.9	105	33-33	1	M	S	G
26	Acala 8 (Cal. Blue Label)	261	577	838	29.91	18	39.96	31.2	76	34-34	1	M	M	M
27 t	Coker's 100	260	638	898	30.17	16	39.87	29.0	102	33-33	1	M	M	M

TABLE 16, (TILLMAN COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
27 t	Paymaster	260	620	880	$29.21	26	$37.78	29.6	91	32-30	2	S	W	W
27 t	Acala 2090	260	594	854	29.47	24	38.64	30.5	92	32-32	1	S	M	M
30	Acala 892	258	565	823	28.74	30	37.46	31.3	92	31-31	1	H	S	G
31	Oklahoma Triumph 32	255	591	846	28.73	31 t	37.41	30.2	98	31-31	1	H	M	G
32	Cliett's Superior	254	473	727	27.46	47	35.88	35.0	68	31-31	1	M	M	G
33	Acala 5 (Hunt)	253	609	862	28.73	31 t	37.39	29.3	99	31-31	1	M	M	G
34 t	Western Mebane 141	252	568	820	27.60	43	35.77	30.7	101	30-29	1	M	W	M
34 t	Kasch	252	507	759	28.13	38	37.30	33.2	75	33-33	1	M	M	G
34 t	Acala 8 (Cal. Poso Fnd.)	252	534	786	28.65	33	38.31	32.1	76	34-34	2	H	M	M
37 t	Bryant's Mebane	251	484	735	27.56	45	36.23	34.2	62	32-32	1	H	S	M
37 t	Ambassador (Stone. 4B)	251	621	872	28.93	28	37.87	28.8	85	33-32	1	M	M	M
37 t	Stoneville 5A	251	584	835	28.56	34	37.43	30.1	99	32-32	1	S	M	M
40	Acala 1114	250	595	845	28.83	29	38.12	29.6	96	33-33	2	M	M	M
41	Wacona #48	249	539	788	27.92	40 t	36.65	31.6	72	33-32	1	M	M	W
42 t	Bagley's Mebane	247	499	746	27.34	48	35.93	33.1	66	33-32	1	S	W	M
42 t	Startex 619	247	564	811	27.50	46	35.59	30.5	96	30-30	1	M	M	M
42 t	Oklahoma Triumph 8	247	609	856	28.44	35	37.24	28.9	99	32-32	1	H	S	G
45	Acala 4067	246	566	812	27.92	40 t	36.61	30.3	90	32-32	1	M	M	M
46	Acala 33-14	243	608	851	28.31	36	37.41	28.6	83	34-33	1	S	M	M
47	Harper's Family U (Regular)	241	475	716	26.56	55	34.91	33.6	72	32-32	1	M	M	M
48	Stoneville 2B	240	595	835	28.15	37	37.52	28.7	80	34-34	1	M	M	M
49 t	Mebane 804-50	239	550	789	26.89	50	35.02	30.3	86	31-31	1	M	M	M
49 t	Lone Star (Gorham)	239	523	762	26.86	51	35.25	31.4	67	32-32	1	H	S	G
49 t	Acala 33-20	239	582	821	27.93	39	37.24	29.1	83	34-34	1	S	M	M
52	Calcala	238	502	740	26.80	52	35.51	32.2	82	33-33	2	S	W	M
53	Sunshine 74-2	237	584	821	27.29	49	35.73	28.9	77	32-32	1	H	S	G
54 t	Roldo Rowden	231	572	803	26.39	57	34.33	28.8	94	31-31	1	H	M	G
54 t	Acala N-28-5	231	491	722	26.05	58	34.51	32.0	84	33-33	1	H	S	G
56	Harper's Family B L	230	553	783	27.73	42	37.12	29.4	78	36-36	1	H	S	G
57 t	Original Mebane Triumph	229	460	689	25.55	59	33.89	33.3	63	33-33	1	S	M	M

TABLE 16, (TILLMAN COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Lgth	Unif.
57 t	Sunshine 83-3	229	589	818	$26.61	54	$34.82	28.0	73	32-32	1	H	S	G
59	Deltapine A	227	481	708	24.56	67	31.85	32.0	106	30-29	2	S	W	W
60	Acala 8 (Okla. B.L. Inc.)	226	486	712	25.54	60	33.83	31.7	74	33-33	1	S	M	M
61 t	Rowden 5056	223	509	732	25.05	65	32.62	30.4	79	31-31	1	H	S	G
61 t	Acala 95	223	614	837	26.77	53	35.60	26.6	88	34-34	1	M	W	M
63	Western Early	222	521	743	25.52	61	33.76	29.9	105	33-33	1	M	M	M
64	Acala 911	221	604	825	26.48	56	35.23	26.8	84	34-34	1	M	M	G
65	Lyon's Acala 8	220	471	691	25.06	64	33.50	31.9	86	34-34	1	M	M	M
66 t	Acala 8 (Okla. Fnd. Inc.)	217	482	699	24.89	66	33.25	31.0	78	34-34	1	S	W	M
66 t	Acala 5 (Jones)	217	515	732	24.35	68	31.50	29.7	115	31-30	1	S	W	W
68	Rowden 2088	216	554	770	25.09	63	32.83	28.1	87	32-32	1	H	S	G
69	Caddo	212	495	707	23.71	70	30.68	30.0	79	31-30	1	M	M	M
70	Acala 8 (Okla. Y.L. Inc.)	209	449	658	23.40	71	30.72	31.7	81	33-32	1	S	W	M
71	Acala 33-10	207	531	738	24.25	69	32.02	28.1	97	33-33	1	H	S	G
72	Spears' Upland Long Staple	182	519	701	22.30	72	29.80	26.0	101	36-35	1	M	M	M

(1) The first figure indicates ACTUAL length, the second -- VALUE length (in 32nds of an inch.)

t - tie (rank columns)

TABLE 17
COTTON VARIETY TEST, 1939
LAWTON, COMANCHE COUNTY, OKLAHOMA

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS (1)				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			Length	Nep	Char	Stgth	Unif.
1	Summercur's Hi-Bred	95	169	264	$8.34	17	$11.53	35.9	140	24-24	1	M	M	G
2	Acala 2105	92	202	294	10.02	1	12.99	31.2	118	29-29	1	M	M	G
3	Acala 2090	90	214	304	9.97	2	12.91	29.7	122	30-29	1	S	W	W
4 t	Ferguson's 406	89	190	279	9.51	5	12.35	31.9	90	28-28	1	S	W	M
4 t	Acala 892	89	212	301	9.86	3	12.77	29.6	102	30-29	1	S	M	M
6	Acala 33-4	87	206	293	9.85	4	12.81	29.8	116	31-31	1	H	S	G
7	Nucala	86	187	273	9.48	6	12.28	31.6	123	30-30	1	M	M	G
8	Acala 1114	81	198	279	9.03	8	11.69	29.1	117	31-29	1	S	W	M
9	Ambassador (Stone. 4B)	79	211	290	9.10	7	11.75	27.2	111	31-30	2	M	M	G
10 t	Qualla X-2 (Regular)	78	138	216	8.17	20	10.62	35.9	106	30-29	1	M	M	M
10 t	Oklahoma Triumph 8	78	200	278	8.79	9 t	11.36	27.9	130	29-29	1	M	M	M
10 t	Oklahoma Triumph 32	78	200	278	8.79	9 t	11.36	27.9	122	29-29	1	M	M	M
10 t	Oklahoma Triumph 67	78	208	286	8.75	12	11.33	27.3	118	29-28	1	S	M	M
14	Acala 5 (Jones)	77	188	265	8.58	13	11.11	29.0	124	30-29	1	M	M	M
15	Roldo Rowden	76	189	265	8.39	15 t	10.87	28.8	106	28-28	1	M	M	G
16 t	Startex 619	75	180	255	8.44	14	10.91	29.5	131	30-30	1	M	M	G
16 t	Acala 33-10	75	199	274	8.78	11	11.48	27.3	114	33-32	2	H	M	M
18 t	New Boykin	74	153	227	7.86	24	10.22	32.7	98	28-28	1	S	W	M
18 t	Acala 33-20	74	187	261	8.20	19	10.62	28.4	127	30-28	2	S	W	W
18 t	Acala 33-23	74	177	251	8.39	15 t	10.92	29.3	148	31-31	1	H	M	G
21 t	Watson	73	169	242	8.04	22	10.42	30.3	94	30-29	1	S	W	W
21 t	Western Mebane 141	73	164	237	7.88	23	10.23	30.7	124	28-28	2	S	W	M
21 t	Half & Half X Lone Star	73	138	211	6.89	52	9.48	34.4	111	26-26	1	S	W	W
21 t	Acala 4067	73	184	257	8.30	18	10.73	28.3	125	30-30	1	M	M	M
25	Western Early	72	169	241	8.06	21	10.43	29.8	121	30-30	2	S	M	M
26 t	Bryant's Mebane	71	158	229	7.65	31	9.94	30.9	99	28-28	2	S	W	W
26 t	Oklahoma Triumph 5	71	166	237	7.84	25	10.15	29.8	110	29-29	1	M	M	G
28 t	Western Mebane 140	70	143	213	7.42	39	9.64	32.8	117	28-28	1	S	W	M

TABLE 17, (COMANCHE COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS (1)				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			Length	Nep	Char	Stgth	Unif.
28 t	Rowden 5056	70	181	251	$7.80	27	$10.09	27.9	104	28-28	1	M	M	G
30 t	Northern Star 101	69	163	232	7.61	26	10.16	29.7	84	31-31	1	H	S	G
30 t	Stoneville 5A	69	163	232	7.63	32 t	9.89	29.9	132	30-29	1	S	W	M
32 t	Original Mebane Triumph	68	145	213	7.36	43	9.44	31.7	123	28-28	2	S	W	W
32 t	Acala 8 (Cal. Poso Found.)	68	136	204	7.38	40	9.57	33.3	104	31-30	3	S	W	W
32 t	Acala 5 (Hunt)	68	159	227	7.51	37 t	9.72	29.8	144	29-29	1	M	M	M
35 t	Harper's Family B L	67	174	241	7.74	29	10.06	28.0	120	31-31	1	M	M	M
35 t	Cliett's Superior	67	129	196	7.12	46	9.25	34.4	132	29-29	1	M	M	M
35 t	Wacona #48	67	159	226	7.32	38 t	9.73	29.6	94	30-30	2	M	M	G
35 t	Sunshine 74-2	67	186	253	7.79	28	10.05	26.3	148	30-30	1	S	M	M
35 t	Rowden 2088	67	180	247	7.63	32 t	9.86	27.2	112	29-29	1	H	S	G
35 t	Paymaster	67	169	236	7.52	35 t	9.73	28.4	99	30-29	1	S	W	M
41 t	Bagley's Mebane	66	144	210	7.18	45	9.31	31.4	104	30-29	2	M	W	W
41 t	Lone Star (Gorham)	66	177	243	7.51	37 t	9.70	27.2	92	29-29	2	S	W	M
41 t	Caddo	66	184	250	7.68	30	9.91	26.2	113	30-30	1	M	M	M
41 t	Coker's 100	66	172	238	7.56	34	9.76	27.6	141	31-30	2	S	W	W
45	Washington(Delfos 719)(Stone)	65	161	226	7.27	42	9.40	28.6	111	30-29	1	S	W	M
46	Acala 8 (Cal. Yel. Label)	64	136	200	7.02	47 t	9.10	32.2	98	32-30	2	S	W	W
47 t	Sunshine 83-3	63	160	223	7.24	44	9.41	28.4	101	31-31	1	M	M	G
47 t	Mebane 804-50	63	151	214	6.90	51	8.94	29.6	108	28-28	1	S	M	W
49 t	Kasch	62	135	197	6.65	57	8.64	31.5	101	28-28	1	S	W	W
49 t	Harper's Family U (Reg.)	62	144	206	6.83	55	8.85	30.2	109	29-29	1	S	M	M
49 t	Deltapine A	62	131	193	6.61	58	8.59	32.2	141	30-28	1	S	W	M
49 t	D & P L 7063 A-44-51	62	138	200	6.87	53	8.90	30.8	122	30-30	1	S	M	M
49 t	Stoneville 2B	62	164	226	6.94	50	8.99	27.3	106	28-28	1	S	W	M
49 t	Acala 8 (Cal. B. Label)	62	134	196	6.95	49	9.12	31.7	110	32-32	1	M	M	M
49 t	Acala 33-14	62	179	241	7.28	41	9.39	25.8	113	32-30	3	S	M	M
56 t	Qualla A-2	60	132	192	6.54	59	8.47	31.5	118	30-29	1	S	W	M
56 t	Farm Relief	60	143	203	5.96	67	8.15	29.5	110	28-26	1	S	W	W
56 t	Acala 31-91	60	161	225	7.02	47 t	9.11	26.7	135	32-31	1	M	M	M

TABLE 17, (COMANCHE COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
59	Calcala	59	117	176	$6.39	60	$8.29	33.3	114	30-30	1	H	S	G
60 t	Acala College Increase	57	122	179	6.09	65	7.91	32.1	109	29-28	1	S	W	W
60 t	Acala 95	57	180	237	6.84	54	8.81	24.1	125	30-30	1	M	M	M
62 t	Spears' Upland Long Staple	56	164	220	6.71	56	8.76	25.3	113	32-32	1	M	M	W
62 t	Acala 8 (Okla. Found.Inc.)	56	119	175	6.15	63	7.97	31.8	110	31-30	2	S	W	M
62 t	Lyon's Acala 8	56	118	174	6.25	61	8.21	32.1	122	32-32	1	M	S	G
65	Deltapine 12	55	134	189	6.21	62	8.03	29.1	117	30-30	2	S	W	W
66	Lankart #94	54	131	185	5.93	68	7.68	29.2	102	28-28	2	S	M	M
67	Acala N-28-5	53	144	197	6.05	66	7.82	27.0	110	30-29	1	S	W	M
68	Acala 911	52	141	193	6.12	64	7.99	27.1	108	33-32	1	M	M	G
69	Acala 8 (Okla. Y.L. Inc.)	51	102	153	5.53	69	7.17	33.6	98	32-30	1	S	W	M
70	D & P L 7063A-33-43	50	115	165	5.43	70	7.04	30.2	140	28-28	1	S	W	M
71	Rogers' Acala 111	48	107	155	5.25	71	6.80	30.8	119	29-29	1	M	M	G
72	Acala 8 (Okla. B.L. Inc.)	46	101	147	5.08	72	6.58	31.6	106	31-30	1	S	W	M

(1) The first figure indicates ACTUAL length, the second -- VALUE length.

t - tie (rank columns)

TABLE 18
COTTON VARIETY TEST, 1939
HOBART, KIOWA COUNTY, OKLAHOMA

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	LBS PER BU.	STAPLE CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR AV.			Length	Neps	Char	Stgth	Unif.
1	Summerour's Hi-Bred	375	636	1011	$34.67	12	$47.73	37.	67	29-29	1	H	S	G
2	Kasch	352	618	970	38.04	1	$ ..	..3	72	31-31	1	H	S	G
3	Calcala	348	650	998	38.34	1	50.92	34.9	80	33-33	1	S	M	M
4	Cliett's Superior	347	559	906	36.30	8	47.10	..3	74	31-31	1	M	M	M
5	Watson	343	649	992	36.33	4	47.20	34.6	63	29-29	1	M	M	M
6	Qualla X-2 (Regular)	340	600	940	36.09	6	47.23	36.2	74	31-31	1	M	M	M
7	Oklahoma Triumph 32	337	733	1070	37.15	3	48.13	..4	82	31-31	1	M	M	M
8	Acala 8 (Cal. Yel. Label)	323	623	946	35.46	5	46.83	34.1	79	33-32	2	S	W	W
9	Original Mebane Triumph	322	558	880	34.08	10	44.76	36.6	81	31-31	1	M	S	G
10	Rowden 5056	319	706	1027	35.95	7	47.16	31.1	61	31-31	1	M	S	G
11	Ferguson's 406	316	621	937	33.23	21	43.22	33.7	69	28-28	1	S	W	M
12	Acala 1114	314	682	996	34.92	11	46.81	31.4	68	31-31	1	M	M	M
13 t	Roldo Rowden	311	706	1019	34.60	13	44.76	30.2	70	30-30	1	M	S	G
13 t	Stoneville 2B	311	750	1061	35.33	9	45.98	29.3	78	33-31	1	S	W	W
15	Harper's Family U (Reg.)	310	546	856	33.21	22	43.41	36.2	66	31-31	1	M	M	M
16	Acala 892	308	629	937	33.86	18	44.17	32.9	87	31-31	1	H	S	G
17 t	Rowden 2088	307	740	1047	35.18	10	46.09	29.3	79	32-32	1	H	S	G
17 t	Acala 8 (Cal. Poso Found.)	307	612	919	34.52	14	46.31	33.4	80	34-34	2	M	S	M
19 t	Acala 8 (Okla. Fnd. Inc.)	305	598	903	34.19	15	45.79	33.8	83	34-34	1	S	M	M
19 t	Lyon's Acala 8	305	577	882	33.37	20	43.89	34.6	89	32-32	1	S	W	W
21	Ambassador (Stone. 4B)	301	702	1003	33.96	17	44.21	30.0	73	31-31	1	S	M	M
22	Northern Star 101	298	601	899	32.98	25	43.33	33.1	74	32-32	1	M	M	M
23	Stoneville 5A	296	692	988	33.41	19	43.49	30.0	77	31-31	2	S	W	W
24	Deltapine A	295	603	898	33.02	24	43.79	32.9	108	33-33	1	H	S	G
25 t	Western Mebane 140	293	567	860	30.72	32 t	39.97	34.1	89	28-28	1	S	W	W
25 t	Startex 619	293	641	934	32.63	27	42.53	31.4	75	31-31	1	M	M	M
25 t	Acala College Increase	293	570	863	32.22	28 t	42.38	34.0	74	32-32	1	M	S	G
25 t	Acala 5 (Jones)	293	658	951	33.10	23	43.41	30.8	105	32-32	1	M	S	G

TABLE 18,(KIOWA COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
29	Acala 8 (Cal. Blue Label)	292	548	840	$32.20	30	$42.76	34.8	91	33-33	1	H	S	G
30	Oklahoma Triumph 8	291	686	977	32.90	26	42.83	29.8	105	31-31	1	H	S	G
31	Oklahoma Triumph 5	288	673	961	32.22	28 t	41.69	30.0	100	30-30	1	M	M	M
32	Nucala	281	604	885	30.91	31	40.04	31.7	103	30-30	1	M	M	M
33	Acala 8 (Okla. B.L. Inc.)	278	537	815	29.97	35	38.88	34.1	82	30-30	2	S	W	M
34 t	Western Mebane 141	274	568	842	29.11	36	37.84	32.6	79	28-28	1	S	W	M
34 t	Acala 116	274	544	818	30.24	34	39.74	33.5	80	32-32	1	M	M	M
34 t	Acala 5 (Hunt)	274	620	894	30.72	32 t	40.02	30.6	88	31-31	1	M	M	M
37	Oklahoma Triumph 67	254	614	868	28.62	37	37.01	29.3	114	30-30	1	S	W	W
38	Paymaster	242	562	804	26.31	38	34.13	30.1	87	30-28	2	S	W	W
39	Deltapine 12	229	479	708	24.71	40	32.06	32.4	117	30-29	2	S	W	W
40	Acala 8 (Okla. Y.L. Inc.)	227	456	683	25.33	39	33.60	33.3	86	33-33	1	M	S	M

(1) The first figure indicates ACTUAL length, the second -- VALUE length (measured in 32nds of an inch.)

t - tie (rank columns)

TABLE 19
COTTON VARIETY TEST, 1939
CORDELL, WASHITA COUNTY, OKLAHOMA

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
1	Northern Star 101	89	148	237	$9.22	2	$12.01	37.7	105	29-29	2	S	W	M
2	Acala 5 (Hunt)	87	171	258	9.58	1	12.59	33.7	124	32-32	1	M	M	M
3	Stoneville 5A	83	146	229	8.81	3	11.44	36.4	117	30-30	1	M	M	M
4	Stoneville 2B	77	129	206	7.10	12 t	9.80	37.3	125	26-26	1	S	W	W
5 t	Deltapine A	75	135	210	7.01	15	9.65	35.5	---	28-26	1	S	W	W
5 t	Ambassador (Stone. 4B)	75	163	238	8.16	4	10.58	31.6	122	29-29	1	S	W	W
7	Oklahoma Triumph 8	73	159	232	7.83	5	10.17	31.4	122	28-28	1	M	M	M
8 t	Western Mebane 141	72	127	199	7.53	7	9.79	36.1	121	29-29	1	M	M	M
8 t	Summerour's Hi-Bred	72	116	188	6.20	22	8.59	38.4	126	24-24	1	S	W	W
8 t	Acala 8 (Cal. Blue Label)	72	151	223	7.77	6	10.08	32.4	102	29-29	2	S	W	W
11	Oklahoma Triumph 5	70	143	213	7.42	9	9.64	32.9	119	28-28	1	M	M	M
12 t	Ferguson's 406	69	145	214	7.35	11	9.55	32.3	101	28-28	1	S	W	W
12 t	Oklahoma Triumph 32	69	141	210	7.41	10	9.62	32.7	134	29-29	1	M	M	M
12 t	Nucala	69	129	198	7.47	8	9.75	34.7	132	31-31	1	S	W	W
15	Paymaster	67	137	204	7.10	12 t	9.22	32.6	133	28-28	1	S	W	W
16 t	Deltapine 12	64	136	200	7.02	14	9.10	31.9	110	30-30	1	S	M	M
16 t	Acala 8 (Cal. Yel. Label)	64	113	177	6.60	16	8.60	35.9	110	28-28	1	S	W	W
18	Original Mebane Triumph	61	125	186	6.47	17 t	8.41	32.9	89	29-28	1	S	W	W
19	Western Mebane 140	60	134	194	6.47	17 t	8.40	30.9	125	28-28	1	S	W	W
20 t	Oklahoma Triumph 67	59	121	180	6.25	20	8.13	32.9	131	28-28	1	S	W	M
20 t	Acala 892	59	108	167	6.12	24	7.98	35.1	---	29-28	2	S	W	W
22 t	Cliett's Superior	58	117	175	6.22	21	8.06	33.3	102	29-29	1	S	M	M
22 t	Lyon's Acala 8	58	112	170	6.31	19	8.24	34.2	117	31-31	2	M	M	M
24	Acala 5 (Jones)	57	110	167	6.14	23	7.97	34.3	113	30-30	1	S	M	M
25	Rowden 2088	56	132	188	6.11	25	7.92	30.0	103	28-28	1	M	M	M
26 t	Startex 619	55	119	174	6.06	26	7.85	31.8	---	30-30	1	S	W	W
26 t	Rowden 5056	55	113	168	5.92	27	7.68	32.8	---	29-29	1	S	W	W
26 t	Acala 1114	55	98	153	5.68	29 t	7.41	36.2	119	28-28	2	S	W	M

TABLE 19, (WASHITA COUNTY), CONTINUED

LINT YIELD RANK	VARIETY	ACRE YIELD			GROSS VALUE PER ACRE			LINT %	BOLLS PER POUND	FIBER CHARACTERISTICS				
		LINT	SEED	S/C	1939 TOTAL	1939 RANK	10-YR. AVE. VALUE TOTAL			(1) Length	Nep	Char	Stgth	Unif.
29 t	Acala 8 (Cal. Poso Fnd.)	53	115	168	$5.68	29 t	$7.38	31.4	110	29-28	1	S	W	W
29 t	Acala 116	53	93	146	5.62	31	7.31	36.4	123	30-30	2	S	W	W
31 t	Qualla X-2 (Regular)	52	128	180	5.88	28	7.61	28.8	90	30-30	2	S	W	M
31 t	Roldo Rowden	52	106	158	5.51	33	7.16	32.9	106	28-28	1	S	W	W
31 t	Calcala	52	108	160	5.53	32	7.19	32.5	108	28-28	1	M	S	G
34	Watson	51	100	151	4.85	38	6.66	33.8	106	26-26	1	S	W	W
35	Acala College Increase	50	94	144	5.42	34	7.08	34.9	125	31-31	2	M	M	M
36 t	Kasch	49	96	145	5.30	35	6.87	34.0	105	30-30	2	S	M	M
36 t	Acala 8 (Okla. Y.L. Inc.)	49	101	150	5.20	36 t	6.76	32.5	115	28-28	1	S	W	W
38	Acala 8 (Okla. Fnd. Inc.)	47	104	151	5.20	36 t	6.73	30.8	114	30-30	1	S	W	W
39	Acala 8 (Okla. B.L. Inc.)	43	96	139	4.64	39	6.02	30.9	115	28-28	1	M	M	M
40	Harper's Family U (Reg.)	41	73	114	3.83	40	5.27	35.8	106	28-26	1	S	W	W

(1) The first figure indicates ACTUAL length, the second -- VALUE length (in 32nds of an inch.)

t - tie (rank columns)

SUMMARY - ALL TESTS

Table 20 gives the total amount of rainfall received at the weather observation station located nearest each test. This table is arranged in three columns headed "storage", "spring", and "growing". Under the heading "storage" is listed the total rainfall received during the months of October, 1938, to March, 1939; under "spring", the total for the months of April and May; under "growing", the total for the months of June, July, and August, 1939. This table is further divided as to location of tests, the eastern-central tests being Payne (Perkins), Wagoner (Porter), Pittsburg (Canadian), Pontotoc (Ada), and Johnston (Tishomingo) counties; and the southwestern tests being Tillman (Tipton), Comanche (Lawton), Kiowa (Hobart), and Washita (Cordell) counties.

Table 20. - Total Rainfall by Crop-Season Periods at Weather Stations Closest to Tests.

TESTS	RAINFALL (in inches) STORAGE	SPRING	GROWING	TOTAL
Eastern-Central:				
Payne (Perkins)	8.51	6.63	10.72	25.86
Wagoner (Porter)	11.60	7.41	11.16	30.17
Pittsburg (Canadian)	13.95	7.62	10.97	32.54
Pontotoc (Ada)	9.43	5.47	8.87	23.77
Johnston (Tishomingo)	12.44	8.18	9.29	29.91
Average	11.19	7.06	10.20	28.45
Southwestern:				
Tillman (Tipton)	8.11	2.54	9.20	19.85
Comanche (Lawton)	8.07	1.26	7.86	17.19
Kiowa (Hobart)	10.63	3.89	7.01	21.53
Washita (Cordell)	7.71	2.67	8.18	18.56
Average	8.63	2.59	8.06	19.28

SOUTHWESTERN TESTS

Table 21 lists the total average acre yield of lint cotton and total average acre income (1939 prices) of the 39 varieties which appeared in all four of the southwestern tests. Considering only the varieties listed in this table, it is seen that, of the ten highest producers, one variety was

of the Half-and-Half type, seven Mebane, one Lone Star, one Acala 5, and one Acala 8 (Western Mebane 140 and Acala 8 (Calif. Yel. Label) were tied for 10th place).

TABLE 21. - List of 39 Varieties Which Appeared in Each of the Tests Conducted at Tipton, Lawton, Hobart, and Cordell, showing Average Acre Lint Yield and 1939 Gross Acre Income, with Rankings.

VARIETY	YIELD LINT COTTON		1939 ACRE INCOME	
	LBS. PER ACRE	RANK	DOLLARS	RANK
Summerour's Hi-Bred	204	1	18.65	26
Watson	200	2	21.44	1
Ferguson's 406	186	3	19.83	6
Qualla X-2 (Regular)	185	4 t	20.02	4
Oklahoma Triumph 32	185	4 t	20.52	2
Cliett's Superior	182	6	19.28	16
Northern Star 101	180	7	19.92	5
Kasch	179	8 t	19.51	11
Acala 892	179	8 t	19.65	7 t
Western Mebane 140	178	10 t	18.88	22
Acala 8 (Cal. Yellow Label)	178	10 t	19.65	7 t
Ambassador (Stoneville 4B)	177	12	20.04	3
Stoneville 5A	175	13 t	19.60	10
Oklahoma Triumph 5	175	13 t	19.45	13
Acala 1114	175	13 t	19.62	9
Nucala	175	13 t	19.42	14
Calcala	174	17	19.27	17
Stoneville 2B	173	18	19.38	15
Oklahoma Triumph 8	172	19 t	19.49	12
Acala 8 (Cal. Blue Label)	172	19 t	19.21	18
Acala 5 (Hunt)	171	21	19.14	19
Original Mebane Triumph	170	22 t	18.34	29
Acala 8 (Cal. Poso Found.)	170	22 t	19.06	20 t
Acala College Increase	170	22 t	19.06	20 t
Western Mebane 141	168	25 t	18.03	31
Startex 619	168	25 t	18.66	25
Roldo Rowden	168	25 t	18.72	23
Rowden 5056	167	28 t	18.68	24
Oklahoma Triumph 67	167	28 t	18.62	27
Deltapine A	165	30	17.80	32
Harper's Family U (Regular)	164	31	17.61	34 t
Rowden 2088	162	32	18.50	28
Acala 5 (Jones)	161	33	18.04	30
Lyon's Acala 8	160	34	17.75	33
Paymaster	159	35	17.54	36

(Table 21 - Continued)

TABLE 21. - (Continued)

VARIETY	YIELD LINT COTTON LBS. PER ACRE	RANK	1939 ACRE INCOME DOLLARS	RANK
Deltapine 12	158	36	17.21	37
Acala 8 (Okla. Found. Incr.)	156	37	17.61	34 t
Acala 8 (Okla. B. Label Incr.)	148	38	16.31	38
Acala 8 (Okla. Y. Label Incr.)	134	39	14.87	39

t - tie (rank columns)

Table 22 gives the list of varieties which appeared among the first ten in yield at either Tipton, Lawton, Hobart, or Cordell, and, also, their respective rank at each of the four tests.

TABLE 22. - Varieties Appearing Among First Ten in Yield in One or More of the Four Southwestern Tests, Showing Rank in Each Test.

VARIETY NAME	TIPTON	LAWTON	HOBART	CORDELL
Half & Half X Lone Star	1	21-T	N P	N P
Watson	2	21-T	5	34
Western Mebane 140	3	28-T	25-T	19
Western Mebane 141	34-T	21-T	34-T	8-T
Deltapine 12	4-T	65	39	16-T
Deltapine A	59	49-T	24	5-T
D & P L 7063A-33-43	4-T	70	N P	N P
D & P L 7063A-44-51	7	49-T	N P	N P
Acala 33-4	6	6	N P	N P
Qualla A-2	8-T	56-T	N P	N P
Qualla X-2 (Regular)	18	10-T	6	31-T
Acala College Increase	8-T	60-T	25-T	35
Oklahoma Triumph 8	42-T	10-T	30	7
Oklahoma Triumph 32	31	10-T	7	12-T
Oklahoma Triumph 67	10	10-T	37	20-T
Summerour's Hi-Bred	11-T	1	1	8-T
Acala 2105	20	2	N P	N P
Acala 2090	27-T	3	N P	N P
Acala 892	30	4-T	16	20-T
Acala 1114	40	8	12	26-T
Acala 5 (Hunt)	33	32-T	34-T	2
Nucala	24-T	7	32	12-T
Calcala	52	59	3	31-T
Acala 8 (Cal. Yel. Label)	24-T	46	8	16-T
Acala 8 (Cal. Blue Label)	26	49-T	29	8-T
Ferguson's 406	15-T	4-T	11	12-T
Kasoh	34-T	49-T	2	36-T
Cliett's Superior	32	35-T	4	22-T
Original Mebane Triumph	57-T	32-T	9	18
Ambassador (Stone. 4-B)	37-T	9	21	5-T
Stoneville 5-A	37-T	30-T	23	3
Stoneville 2-B	48	49-T	13-T	4
Rowden 5056	61-T	28-T	10	26-T
Northern Star 101	23	30-T	22	1

N P - Not planted.

T - tie (rank)

EASTERN-CENTRAL TESTS

Table 23 lists the total average acre yield of lint cotton and the total average acre income (1939 prices), with rankings, of 32 varieties, each of which appeared in the five eastern and central tests. Considering

only the varieties listed in this table, it is seen that, of the ten highest producers, one variety was of the Half-and-Half type, one Mebane, four Deltapine, three Stoneville, and one Rowden.

TABLE 23. - List of 32 Varieties Which Appeared in Each of the Tests Conducted at Perkins, Porter, Canadian, Ada, and Tishomingo, Showing Average Acre Lint Yield and 1939 Gross Acre Income, With Rankings. *

VARIETY	ACRE LINT YIELD POUNDS	RANK	1939 ACRE INCOME TOTAL	RANK
Deltapine 12	495	1	$53.04	1
Half & Half X Lone Star	485	2	46.50	18
D & P L 7063A-44-51	483	3	52.49	3 t
Oklahoma Triumph 8	477	4	52.72	2
Stoneville 2B	467	5	52.49	3 t
D & P L 7063A-33-43	466	6 t	49.53	10
Stoneville 5A	466	6 t	51.10	5
Deltapine A	465	8	50.33	8
Rowden 5056	460	9	49.82	9
Washington(Delfos 719)(Stone)	458	10	50.37	7
Ambassador (Stoneville 4B)	456	11	50.77	6
Summerour's Hi-Bred	453	12	43.11	21
Acala 892	445	13	47.87	13
Oklahoma Triumph 32	440	14	48.41	11
Oklahoma Triumph 5	435	15	47.92	12
Northern Star 101	432	16	46.67	16
Acala 5 (Hunt)	428	17	47.49	15
Roldo Rowden	427	18	47.53	14
Ferguson's 406	426	19	45.14	19
Oklahoma Triumph 67	423	20	46.56	17
Wacona #48	411	21	44.74	20
New Boykin	402	22	42.64	24
Qualla A-2	394	23	42.80	23
Acala 8 (Cal. Yel. Label)	391	24	43.10	22
Acala 5 (Jones)	390	25	42.57	25
Qualla X-2 (Regular)	383	26	41.22	26
Lankart #94	382	27	40.92	27
Original Mebane Triumph	371	28	39.64	28
Acala 8 (Okla. Fnd. Inc.)	358	29	39.28	29
Calcala	349	30	38.54	31
Lyon's Acala 8	348	31	38.24	32
Spears' Upland Long Staple	327	32	38.71	30

* Tests conducted in Payne, Wagoner, Pittsburg, Pontotoc, and Johnston Counties.

t - tie (rank columns)

Table 24 gives the list of varieties which appeared among the first ten in yield at either Perkins, Porter, Canadian, Ada, or Tishomingo, and, also, their respective rank at each of the five tests.

TABLE 24. - Varieties Appearing Among First Ten in Yield in One or More of the Five Eastern-Central Tests, Showing Rank in Each Test.

VARIETY NAME	PERKINS	PORTER	CANADIAN	ADA	TISHOMINGO
Half & Half X Lone Star	1	9	5-T	5	2-T
Summerour's Hi-Bred	7	19	11	19	1
Deltapine A	2	12	9	18	12
Deltapine 12	3	2	2	28-T	14
D & P L 7063A-33-43	36-T	10	1	13	6-T
D & P L 7063A-44-51	16	4	5-T	9-T	4
Stoneville 5-A	4	7	13-T	3	27
Stoneville 2-B	5	6	7	35-T	11
Ambassador (Stone. 4B)	10	15	4	31	9
Washington(Delfos 719)(Stone.)	15	5	10	23-T	25-T
Western Mebane 140	6	N P	3	N P	N P
Watson	8-T	N P	17	27	21-T
Wacona #48	41-T	22	8	4	35
New Boykin	24	33	18-T	7	13
Qualla A-2	50	27	47	8	16
Northern Star 101	18-T	11	40-T	9-T	30
Oklahoma Triumph 5	32	8	54	22	2-T
Oklahoma Triumph 8	13-T	1	22	20	6-T
Oklahoma Triumph 32	20	13	36-T	37	8
Rowden 5056	44	3	13-T	9-T	17
Rowden 41-A	29-T	N P	16	1	N P
Sunshine 83-3	31	N P	18-T	6	25-T
Acala 892	8-T	20	34-T	2	5
Acala 8 (Calif. Yel.Label)	41-T	28	46	34	10

N P - Not Planted
T - Tie

The following 23 varieties were grown in each of the nine (9) tests conducted in 1939: Original Mebane Triumph, Qualla X-2 (Regular), Ferguson's 406, Northern Star 101, Rowden 5056, Roldo Rowden, Deltapine A, Deltapine 12, Ambassador (Stoneville 4B), Stoneville 2B, Stoneville 5A, Oklahoma Triumph 5, Oklahoma Triumph 8, Oklahoma Triumph 32, Oklahoma Triumph 67, Summerour's Hi-Bred, Acala 8 (Cal. Yellow Label), Acala 8 (Oklahoma Foundation Increase), Calcala, Lyon's Acala 8, Acala 892, Acala 5 (Jones), and Acala 5 (Hunt).

The average acre yield of lint for these 23 varieties at each of the nine tests was as follows:

Eastern & Central:		Southwestern:	
TEST	POUNDS	TEST	POUNDS
Perkins	417	Tipton	249
Porter	859	Lawton	72
Canadian	379	Hobart	306
Ada	191	Cordell . . .	66
Tishomingo	281		

The average acre yield of these 23 varieties on the four tests in the southwestern part was 173 pounds of lint; for the five eastern and central tests, 425 pounds; and, for all nine tests, 313 pounds. The average boll size of twenty (20) of these varieties (excluding Rowden 5056, Deltapine A, and Acala 892), was 102 bolls per pound for the four southwestern tests; 80 bolls per pound for the five eastern and central tests; and 90 bolls per pound for all nine tests. The average lint percent of the 23 varieties on the four southwestern tests was 31.9(%); for the five eastern and central, 34.5(%); and, for the average of all nine tests, 33.4(%). The average staple length (actual) for these 23 varieties on the four southwestern tests was 30.3 thirty-seconds; for the five eastern and central tests, 30.9 thirty-seconds; and, for the average of all nine tests, 30.6 thirty-seconds.

From these data it will be seen that yield, boll size, and lint percent are affected in a rather significant manner by the different moisture conditions which prevailed in the eastern and southwestern sections of the Oklahoma cotton belt in 1939. The staple length, however, was not affected in a significant way, as the average staple of the 23 varieties differed by only six-tenths of a thirty-second between the eastern and southwestern sections. The maturity of the fiber produced in the southwestern tests was much poorer than in the eastern tests, which accounts for the fact that lint percent on the southwestern tests was lower than on the eastern tests. Hot winds during the first week in August and in the first two weeks in September resulted in a large percentage of immature fibers in many of the varieties, particularly in the southwestern tests; but this condition evidently did not appreciably affect the length of staple, although it did affect lint percent.

AVERAGE LINT PERCENT, BOLL SIZE, AND STAPLE LENGTH OF EACH OF 23 VARIETIES WHICH WERE INCLUDED IN ALL NINE TESTS

VARIETY	LINT %	BOLL SIZE	STAPLE[1]
Original Mebane Triumph	35.0	78	30.2
Qualla X-2 (Regular)	35.3	72	31.0
Ferguson's 406	34.6	82	29.0
Northern Star 101	34.4	79	31.1
Rowden 5056	32.2	81	29.7
Roldo Rowden	31.3	78	29.9
Deltapine A	35.1	102	31.2
Deltapine 12	34.4	105	30.9
Ambassador (Stoneville 4B)	31.2	83	31.3
Stoneville 2B	31.7	89	31.4
Stoneville 5A	33.0	97	31.2
Oklahoma Triumph 5	31.4	101	30.0
Oklahoma Triumph 8	31.1	99	30.2
Oklahoma Triumph 32	31.5	96	29.9
Oklahoma Triumph 67	31.3	100	29.8
Hi-Bred (Summerour)	38.6	97	25.9
Acala 8 (Cal. Yellow Label)	34.6	80	32.4
Acala 8 (Okla. Found. Inc.)	33.8	86	32.7
Calcala	34.2	85	32.1
Lyon's Acala 8	34.5	89	32.7
Acala 892	33.9	81	30.3
Acala 5 (Jones)	32.1	97	30.3
Acala 5 (Hunt)	31.9	97	30.9

(1) Measured in 32nds of an inch.

SOURCES OF SEED

Acala 5 (Hunt)	Jim Hunt, Porter, Oklahoma
Acala 5 (Jones)	Jones Certified Seed Assn., Jones, Okla.
Acala 8 (Blue Label)	Calif.Planting Cotton Seed Distrs., Bakersfield, Calif.
Acala 8 (Foundation Poso)	Calif. Planting Cotton Seed Distrs.
Acala 8 (Yellow Label)	Calif. Planting Cotton Seed Distrs.
Acala 8 (Okla. Blue Label Inc.)	Okla. Agri. Expt. Station, Tipton, Okla.
Acala 8 (Okla. Foundation Inc.)	Okla. Agri. Expt. Station, Tipton, Okla.
Acala 8 (Okla. Yellow Label Increase)	Okla. Agri. Expt. Station, Tipton, Okla.
Acala College Increase	U. S. Cotton Field Station, State College, New Mexico.
Acala 8 (Lyon)	Lyon Seed Farms, Geary, Oklahoma
Acala N-28-5	U. S. Cotton Field Station, State College, New Mexico.
Acala 31-91	Okla. Agri. Expt. Station, Stillwater, Okla.
Acala 33-4	Okla. Agri. Expt. Station, Stillwater, Okla.
Acala 33-10	Okla. Agri. Expt. Station, Stillwater, Okla.
Acala 33-14	Okla. Agri. Expt. Station, Stillwater, Okla.
Acala 33-20	Okla. Agri. Expt. Station, Stillwater, Okla.
Acala 33-23	Okla. Agri. Expt. Station, Stillwater, Okla.
Acala 95	Okla. Agri. Expt. Station, Stillwater, Okla.
Acala 116	University of Arkansas, Cotton Branch Station, Marianna, Ark.
Acala 892	University of Arkansas, Cotton Branch Station, Marianna, Ark.
Acala 911	Okla. Agri. Expt. Station, Stillwater, Okla.
Acala 1114	Univ. of Ark., Cotton BranchStation, Marianna, Ark.
Acala 2090	University of Arkansas, Cotton Branch Station, Marianna, Ark.
Acala 2105	University of Arkansas, Cotton Branch Sta.
Acala 4067	University of Arkansas, Cotton Branch Sta.
Ambassador (Stoneville 4B)	Stoneville Pedigreed Seed Co.,Stoneville,Miss.
Bagley's Mebane	Bagley & Sons, Martindale, Texas
Bryant's Mebane	Jno. J. Bryant, Corsicana, Texas
Caddo	Lankart Bred Seed Farms, Waco, Texas
Calcala	Oran W. Cliett, San Marcos, Texas
Cliett's Superior	Cliett Cotton Breeding Farms, San Marcos,Tex.
Coker's 100	Coker's Pedigreed Seed Farms,Hartsville, S.C.
Deltapine A	Delta & Pine Land Co. of Miss., Scott, Miss.
Deltapine 12	Delta & Pine Land Co. of Miss., Scott, Miss.
D & P L 7063A-33-43	Delta & Pine Land Co. of Miss., Scott, Miss.
D & P L 7063A-44-51	Delta & Pine Land Co. of Miss., Scott, Miss.
Farm Relief	Coker's Pedigreed Seed Farms,Hartsville, S.C.
Ferguson's 406	Ferguson Seed Farms, Howe, Texas

SOURCES OF SEED (Continued)

Half & Half X Lone Star	Texas Agri. Expt. Sta., Nacogdoches, Tex.
Harper's Family BL	Robt. M. Harper, Martindale, Texas
Harper's Family U (Regular)	Robt. M. Harper, Martindale, Texas
Hi-Bred	B. F. Summerour Seed Co., Norcross, Ga.
Kasch	Ed Kasch Cotton Breeding Co., San Marcos, Tex.
Lankart #94	Lankart Bred Seed Farms, Waco, Texas
Lone Star (Gorham)	Jno. Gorham & Son, Waco, Texas
Mebane (Original Triumph)	A. D. Mebane Estate, Lockhart, Texas
Mebane 804-36	Texas Agri. Expt. Station, Angleton, Tex.
Mebane 804-50	Texas Agri. Expt. Station, Beeville, Tex.
New Boykin	Ferguson Seed Farms, Howe, Texas
Northern Star 101	Lankart Bred Seed Farms, Waco, Texas
Nucala	U. S. Cotton Field Station, Greenville, Tex.
Oklahoma Triumph 5	Okla. Agri. Expt. Station, Stillwater, Okla.
Oklahoma Triumph 8	Okla. Agri. Expt. Station, Stillwater, Okla.
Oklahoma Triumph 32	Okla. Agri. Expt. Station, Stillwater, Okla.
Oklahoma Triumph 67	Okla. Agri. Expt. Station, Stillwater, Okla.
Paymaster	Lockview Farms, Plainview, Texas
Qualla A-2	H. Conrads, San Marcos, Texas
Qualla X-2 (Regular)	H. Conrads, San Marcos, Texas
Rogers' Acala 111	Jno. D. Rogers, Navasota, Texas
Roldo Rowden	R. L. Dortch, Scott, Arkansas
Rowden 41-A	University of Arkansas, Cotton Branch Station, Marianna, Ark.
Rowden 41-B	University of Arkansas, Cotton Branch Station
Rowden 2088	University of Arkansas, Cotton Branch Station
Rowden 5056	University of Arkansas, Cotton Branch Station
Spear's Upland Long Staple	United One-Variety Cotton Communities of America, Inc., Oneonta, Ala. (C.L. Spears, Pres.)
Startex 619	Texas Agri. Expt. Station, College Sta., Tex.
Stoneville 2B	Stoneville Pedigreed Seed Co., Stoneville, Miss.
Stoneville 5A	Stoneville Pedigreed Seed Co., Stoneville, Miss.
Sunshine 74-2	Texas Agri. Expt. Station, Denton, Texas.
Sunshine 83-3	Texas Agri. Expt. Station, Denton, Texas.
Wacona #48	Lankart Bred Seed Farms, Waco, Texas
Washington(Delfos 719)(Stone.)	Stoneville Pedigreed Seed Co., Stoneville, Miss.
Watson	Ferris Watson & Sons, Garland, Texas
Western Early	Texas Agri. Expt. Station, Lubbock, Texas
Western Mebane 140	Texas Agri. Expt. Station, Chillicothe, Texas
Western Mebane 141	Texas Agri. Expt. Station, Chillicothe, Texas